



Paramedicine in Ontario:
Consideration of the Application for the Regulation of Paramedics
under the *Regulated Health Professions Act, 1991*

Volume 1



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Health Professions Regulatory
Advisory Council

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December 20, 2013

The Honourable Deb Matthews
Minister of Health and Long-Term Care
10th Floor Hepburn Block
80 Grosvenor Street
Toronto, ON M7A 2C4

Dear Minister,

We are pleased to present our report on whether paramedics should be regulated under the *Regulated Health Professions Act, 1991* (RHPA).

As part of our standard process, we completed literature, jurisdiction and jurisprudence reviews. We also conducted a consultation program, during which we heard from a range of stakeholders, including members of the profession; other regulated health professions' colleges and associations; other associations, such as those representing paramedics; unions representing some rank-and file-paramedics; and key stakeholders, such as representatives from MOHLTC and its partners in the delivery of ambulance services, the base hospital system and the municipalities that deliver EMS to their communities.

Although we recognize that paramedics are skilled health professionals who have earned the respect of their peers, HPRAC recommends that paramedics not be regulated under the RHPA because the application did not meet our primary criterion threshold for risk of harm and because self-regulation of paramedics is not in the public interest. Although paramedic practice entails a degree of risk of harm to the health and safety of the public, and the current oversight system is overly complex, the oversight system as a whole is sound and adequately addresses risk of harm to patients.

We look forward to meeting with you to discuss the findings in this report and our recommendations.

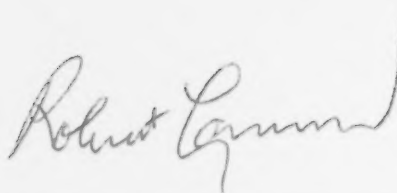
Sincerely,

A handwritten signature in dark ink, appearing to read "Thomas Corcoran", written over a horizontal line.

Thomas Corcoran, Chair



Rex Roman, Vice Chair



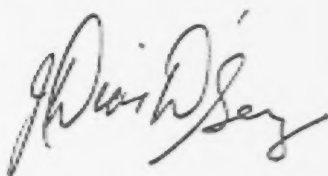
Bob Carman, Member



Said Tsouli, Member



Peggy Taillon, Member



Jeanette Dias D'Souza, Member

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Report by the Health Professions Regulatory Advisory Council

December 2013

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Executive Summary

In a referral letter dated June 28, 2007, the Minister of Health and Long-Term Care asked the Health Professions Regulatory Advisory Council (HPRAC) to advise whether paramedics and emergency medical attendants (EMAs) should be regulated in Ontario under the *Regulated Health Professions Act, 1991* (RHPA), and, “if so, what would be the appropriate scope of practice, controlled acts, and titles authorized to the profession.”

Paramedics deliver emergency health care to individuals in environments that may be chaotic, dangerous and socially complex. The general public accesses paramedic services by calling 911. The ambulance system, which includes paramedics and EMAs, is currently governed by the Ministry of Health and Long-Term Care (MOHLTC) through the *Ambulance Act* and its regulations, as well as standards and policies.

MOHLTC has also developed a system of regional base hospitals to work with the municipal providers of ambulance services in the delivery of pre-hospital emergency medical services. Paramedics are authorized by base hospital physicians to perform controlled acts; as well, a series of other protective measures safeguard public safety. The system has a high rate of paramedic-patient interaction: in a 12-month period, over 1.9 million requests were made for an ambulance and more than 900,000 transports were completed. With the quite recent introduction of community paramedicine programs, the profession is evolving, and outward pressure on paramedics’ scope of practice has been identified as a potential catalyst for change within the profession. HPRAC invited the Ontario Paramedic Association (OPA), the profession’s provincial association, to submit an application for the regulation of paramedics under the RHPA. In March 2013, OPA submitted that application. This report outlines the results of HPRAC’s review of OPA’s application, as well as HPRAC’s assessment of other research available at this time.

As part of its assessment, HPRAC conducted an extensive public consultation program between April and July 2013, asking a number of organizations and individuals to comment on the issue. By the close of the consultation period, 444 stakeholders provided submissions. Key informant interviews were also conducted, in order to identify stakeholders’ interests and concerns.

In addition, a literature review, jurisdictional review and jurisprudence review were completed and made publicly available during the consultation period. HPRAC conducted further research where warranted, including an assessment of the current oversight system.

HPRAC’s criteria are the means by which it decides whether to recommend a health profession for regulation. Applicants from professions seeking regulation under the RHPA must meet a “risk of harm threshold” and demonstrate with evidence that there is a risk to the public and that it is otherwise in the public interest that the particular profession be regulated under the Act. Once an application meets the risk of harm threshold, HPRAC determines whether regulation under the RHPA is the most appropriate course of action or whether another risk mitigation approach would result in a better outcome. HPRAC’s criteria do not include an assessment of the merits of the profession seeking regulation.

Based on the application of HPRAC's criteria to the submission, and on additional information available at the time of writing, the applicant did not meet the risk of harm threshold. The self-regulation of paramedics is not in the public interest. HPRAC therefore recommends that paramedics not be regulated under the RHPA.

HPRAC also identified a number of areas that MOHLTC can consider to broaden its view of the paramedic profession, including expanding and refining the base hospital program's oversight; streamlining and, at the same time, making more comprehensive the oversight of paramedics; providing title protection to paramedics; and making interprofessional collaboration a cornerstone of the delivery of pre-hospital emergency health care.

Chapter I: Recommendation

The Health Professions Regulatory Advisory Council (HPRAC) recommends that paramedics not be regulated under the *Regulated Health Professions Act, 1991* (RHPA).

Why This Decision?

HPRAC used its two-part criteria and process to assess the Ontario Paramedic Association's (OPA's) proposal for the regulation of paramedics under the RHPA.

HPRAC recognizes that paramedic practice entails a degree of risk of harm to the health and safety of the public. HPRAC also acknowledges the complexity of the current oversight system for paramedics. HPRAC reviewed the available evidence and has determined that the current oversight system adequately addresses risk of harm, and, based on the evidence presented, that system complexity has not translated into risk of harm for patients.

HPRAC concludes that the risk of harm threshold has not been met and that self-regulation of paramedics is not in the public interest.

Other Points for Consideration

The Ministry of Health and Long-Term Care (MOHLTC) can evolve the delivery of pre-hospital emergency care by replacing its focus on ambulance services with a broader view of the paramedic profession. To help improve patient care and leverage the significant skills and abilities of these healthcare professionals, changes to ambulance services could include:

- An expansion of the base hospital program to cover all instances of delegation of controlled acts to paramedics, such as community paramedicine initiatives;
- Revisions to the ALS and BLS standards,¹ to ensure that all medical acts are overseen by the base hospital program;
- Title protection for paramedics;
- Improvements to the effectiveness and efficiency of the oversight system, including changes to the complaints process; and
- Enhancing interprofessional care (IPC) opportunities as a guiding principle in the delivery of pre-hospital emergency health care.

¹ All paramedics in Ontario are required to provide patient care in accordance with the standards and procedures set out in the Basic Life Support (BLS) standards; ACPs and CCPs are further required to meet the Advanced Life Support (ALS) standards. O Reg 257/00, ss. 11 a-b, accessed December 19, 2013, http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_000257_e.htm.

Chapter II: Background

Referral Question

On June 28, 2007, the Health Professions Regulatory Advisory Council (HPRAC) was asked by the then-Minister of Health and Long-Term Care to “advise whether paramedics and emergency medical attendants [EMAs] should be regulated under the RHPA, and if so, what would be the appropriate scope of practice, controlled acts, and titles authorized to the profession.”

The referral was reconfirmed by the Minister on February 25, 2009; March 26, 2010; and April 19, 2011. On March 26, 2010, the Honourable Deb Matthews requested the advice by December 31, 2013.

Delivering Paramedic Care

Emergency medical services (EMS), or ambulance services, deliver health care to individuals suffering from sudden and serious illness. The public can access EMS (and police and fire services, EMS’s public safety partners) by calling 911. MOHLTC reports that, in a 12-month period, over 1.9 million requests were made for an ambulance and more than 900,000 transports were completed.²

MOHLTC governs Ontario’s ambulance system, including paramedics and EMAs,³ through the *Ambulance Act*⁴ and its regulations,⁵ and standards and policies; MOHLTC’s Emergency Health Services Branch (EHSB) leads this work. EHSB has developed partnerships, through legislation and agreements, with Ontario’s hospital system and the municipalities that deliver EMS to their communities.

MOHLTC has developed a system of eight (seven land and one air) regional base hospitals to provide leadership and direction on the medical aspects of pre-hospital emergency health care.

² MOHLTC, “Emergency Health Services Branch Statistics,” accessed November 3, 2013,

http://www.health.gov.on.ca/english/public/%5Cprogram/ehs/ehs_dt.html.

³ The Ontario Paramedic Association (OPA) has clarified that “EMA” is “a legacy definition used in the *Ambulance Act* for grandfathering purposes that no longer has any corresponding entry-to-practice mechanism” (see page 3 of the application). MOHLTC has also stated that “All paramedics, regardless of classification, can be broadly referred to as EMAs” (see http://www.health.gov.on.ca/english/public/program/ehs/qa/edu_qa.html#1). As a result, this report refers to “paramedics” rather than “paramedics and EMAs.”

⁴ *Ambulance Act*, accessed November 12, 2013, http://www.e-laws.gov.on.ca/html/statutes/english/claws_statutes_90a19_e.htm.

⁵ O Reg 129/99, accessed November 12, 2013, <http://www.search.e-laws.gov.on.ca/en/isysquery/6c62a865-b775-4bf1-8d8c-d68b202c6a6f/1/doc/?search=browseStatutes&context=#hit1>; O Reg 257/00, accessed November 12, 2013, <http://www.search.e-laws.gov.on.ca/en/isysquery/6446d0c3-7bca-4c9c-a6cf-b2fdabc0576e/1/doc/?search=browseStatutes&context=#hit1>; and O Reg 497/07, accessed November 12, 2013, <http://www.search.e-laws.gov.on.ca/en/isysquery/d341ddc4-23a2-418c-82f7-bcc394779b63/1/doc/?search=browseStatutes&context=#hit1>.

Each base hospital delivers training, quality assurance, certification, education and advice to paramedics from within a host hospital.

The municipal EMS providers lead the actual delivery of ambulance services in their local area. Their duties include developing a governance and organizational structure to enable the delivery of services, managing vehicles and paramedics, and funding ambulance operations. EHSB states that "the province provides a grant to municipalities for 50 per cent of the approved costs for providing services required under legislated standards."⁶

There are 53 municipal EMS providers in Ontario (municipal, private, hospital, First Nations and volunteer).⁷ These EMS providers work with eight base hospitals (seven land, one air) and with MOHLTC to deliver pre-hospital emergency health care.

As in the rest of Canada, Ontario has three levels of paramedic, with each level building on the competencies and skills of the prior level and assuming its scope of practice. In its application for self-regulation for paramedics, OPA described these occupational levels:⁸

- Primary Care Paramedics (PCPs) work with another PCP or higher-level paramedic when providing basic medical care on both emergency and non-emergency calls.
- Building on PCP-level knowledge and skills, Advanced Care Paramedics (ACPs) provide enhanced levels of assessment and care for critical patients. ACPs may also perform invasive interventions.
- In addition to having ACP-level knowledge and skills, Critical Care Paramedics (CCPs) provide in-depth assessments, including interpreting laboratory data. Treatments are often invasive. CCPs practise more autonomously; they also have frequent and direct access to medical authorities to consult on patients.

PCPs are the largest group of paramedics in Canada.⁹ In Ontario, approximately 80% of the province's 7,000 paramedics are PCPs, approximately 20% are ACPs and less than 0.5% are CCPs. Most paramedics in Ontario (i.e., approximately 70%) work full-time; the rest work part-time.

To gain entry to practice in Ontario, legislated patient care-related requirements include passing a comprehensive provincial exam set by MOHLTC: the Advanced Emergency Medical Care Assistant (A-EMCA).¹⁰ Paramedics also need to have an offer of employment from a municipal EMS provider, followed by certification by the base hospital with which the paramedic will be affiliated. The base hospital certification permits paramedics to perform controlled acts when working for the municipal EMS provider.¹¹

⁶ MOHLTC, "Emergency Health Services Branch Statistics."

⁷ Ibid.

⁸ OPA application, 4.

⁹ Ibid.

¹⁰ MOHLTC, "Paramedic Education and Certification, Questions and Answers," accessed November 7, 2013, http://www.health.gov.on.ca/english/public/program/ehs/qa/edu_qa.html#1.

¹¹ OPA application, Ifn.

To ensure continuing patient care-related competency, paramedics must be recertified with the base hospital every year by taking continuing medical education (CME) courses. Those courses that are related to the controlled acts are offered by the base hospital; the municipal EMS provider provides CME courses on other subjects. (For more information on the oversight of paramedics, see Chapter IV.)

Evolution of the Profession

Paramedic practice has a long history, and its duties and character have evolved as the health care system has changed. HPRAC reviewed the history of the paramedic profession and published highlights of that history in its resource document, *Backgrounder for Paramedics and Emergency Medical Attendants (EMA) Referral*.¹²

- Distant past — Emergency medical services date back as far as the Greek and Roman Empire eras, when injured soldiers in the battlefield were removed by horse and cart.¹³
- Early 1900s — Ambulance service operators in Ontario were private enterprises that collected fees from patients and usually diversified into other forms of business; the vehicles used to transport patients included delivery trucks, station wagons and hearses.¹⁴
- Late 1960s — A trend developed in Ontario toward formalized pre-hospital care, including minimum standards for ambulance attendant training, ambulance equipment and vehicle design.¹⁵
- 1960s–1990s — Ontario reorganized and streamlined operations. MOHLTC funded all ambulance services in the province, set standards, provided equipment and managed dispatch centres.
- 1988 — MOHLTC designated base hospitals in Ontario.¹⁶
- 1998 — Partial responsibility for land ambulance services was transferred to upper-tier municipalities and designated delivery agents. Today, ambulance services are delivered jointly by the municipalities and MOHLTC.
- 1990s — The paramedic profession in Ontario continued to organize and to incorporate new standards and new technology.
- 2002 — The base hospital system was streamlined to improve consistency. The existing 21 base hospitals underwent a realignment that resulted in the current framework of eight base hospitals.

¹² HPRAC, *Backgrounder for Paramedics and Emergency Medical Attendants Referral*, accessed November 13, 2013, <http://hprac.org/en/projects/resources/BackgrounderforParamedicsandEmergencyMedicalAttendantsv42012-12-10Tams.pdf>.

¹³ Committee on the Future of Emergency Care in the United States Health System & Board on Health Care Services, "History and Current State of EMS," *Future of Emergency Care, Emergency Medical Services at the Crossroads*, Washington, DC: The National Academies Press, 2007.

¹⁴ Hanna, James A, *A Century of Red Blankets — A History of Ambulance Service in Ontario*, Boston Mills Press, Erin, ON: 1982.

¹⁵ OPA, "History of Paramedics," accessed October 18, 2012, <http://www.ontarioparamedic.ca/index.php/paramedics/history-of-paramedics>.

¹⁶ Ibid.

- Today — Paramedics provide care through pre-written protocols or standing orders. A paramedic typically seeks advice after the options in the standing orders have been exhausted.
- Today, and tomorrow — Medical innovation and emerging technologies have created a pressure to expand paramedics' scope of practice. With this expansion, there has been an emerging need to advance paramedic training in order to meet an increasingly complex practice.
- Today, and tomorrow — A new role for paramedics has recently been identified within the emerging field of community paramedicine. Here, some paramedics deliver care to people who require assessment, treatment and management for low-acuity medical problems, chronic health issues and health maintenance. Community paramedics are responsible for such things as assessing the patient, deciding on best practice treatment options and communicating with the patient and his or her family members. (For more information on community paramedicine, see Chapter IV.)

Scene Management

Along with the police and fire departments, EMS is a public safety service. As a result, paramedics' practice setting is unique among the health professions. Paramedics attend emergencies and treat a wide range of patients in environments that may be chaotic, dangerous and socially complex.

Some experts have theorized that paramedics are required to coordinate specific social processes and control the activities that occur in the space immediately around the patient in order to access the patient and to provide care.¹⁷ Dr. Anthony Campeau observed that "Paramedics must 'fit' medical procedures into their work context; consequently, paramedic practice is a unique type of care. Paramedics achieve the remarkable objective of transforming every day, uncontrolled locations where emergencies occur into settings that can be used to effectively deliver emergency care."¹⁸ The practice setting — not the treatments paramedics use — differentiate paramedic practice from that of other health care providers.¹⁹

Scene management can include:²⁰

1. Establishing a safety zone;
2. Reducing uncertainty through social relations;
3. Controlling the trajectory of the scene;
4. Temporarily being at the scene; and
5. Collateral monitoring.

Figure 1 outlines Campeau's space-control theory of scene management.

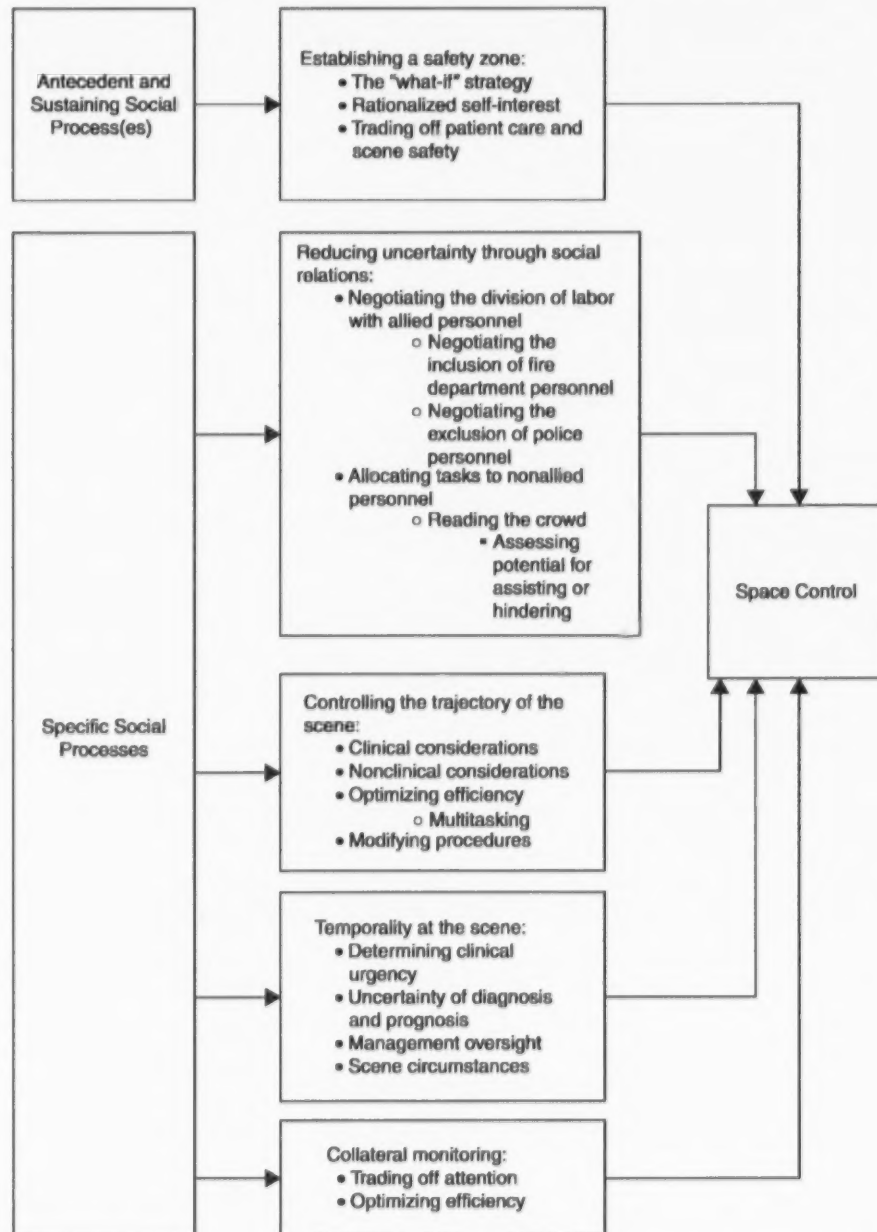
¹⁷ Anthony Campeau, "The Space-Control Theory of Paramedic Scene Management," *Symb Interact* 31(3).

¹⁸ *Ibid.*, 286.

¹⁹ Anthony Campeau, "The Space-Control Theory of Paramedic Scene Management."

²⁰ Anthony Campeau, "A Space-Control Theory of Paramedic Scene Management" (PhD Diss., University of Toronto, 2007).

Figure 1: The Space-Control Theory of Paramedic Scene Management



Source: Anthony Campeau, "The Space-Control Theory of Paramedic Scene Management," *Symb Interact* 31(3):290.

The Auditor General of Ontario

The Office of the Auditor General of Ontario has commented on some issues that fit within the scope of HPRAC's paramedic and EMA referral. For example, various reports published between 2000 and 2012 address patient transportation,^{21,22} air ambulance operators and processes,^{23,24,25} base hospitals,^{26,27} ambulance off-loading and the impact on wait times,^{28,29} and paramedic triage training.^{30,31}

In 2005, findings about base hospitals included inconsistencies in performance reporting across the hospitals and concern about the completeness of reported information and adherence to standards.³² The report also described an uneven history in the modernization of the base hospital system. In a follow-up report, in 2007, the Auditor noted that the consolidation and realignment of base hospitals, which was anticipated to address the previous findings, had commenced.³³ (In 2009, base hospital realignment was completed.³⁴)

In a 2010 report, the Auditor also examined ambulance off-loading and the related impacts on wait times as an element of its audit on whether a sample of emergency departments (EDs) had the appropriate administrative infrastructure to manage and coordinate services efficiently and cost effectively in a reportable fashion and according to legislative requirements.³⁵ The report included anecdotes about paramedics staying in emergency departments for up to three hours

²¹ Office of the Auditor General of Ontario, *Special Report on Accountability and Value for Money* (2000), c. 3.09, 160–82, accessed November 13, 2013, http://www.auditor.on.ca/en/reports_en/cn00vfm/309cn00vfm.pdf.

²² Office of the Auditor General of Ontario, *Annual Report* (2005), c. 3.02, 35–59, accessed November 13, 2013, http://www.auditor.on.ca/en/reports_en/cn05/302cn05.pdf.

²³ Office of the Auditor General of Ontario, *Special Report* (March 2012), 37–9, accessed November 13, 2013, http://www.auditor.on.ca/en/reports_en/orngc_web_en.pdf.

²⁴ Office of the Auditor General of Ontario, *Annual Report* (2005), c. 3.01, 24–32, accessed November 13, 2013, http://www.auditor.on.ca/en/reports_en/cn05/301cn05.pdf.

²⁵ Office of the Auditor General of Ontario, *Annual Report* (2007), c. 4.01, 332–5, accessed November 13, 2013, http://www.auditor.on.ca/en/reports_en/cn07/401cn07.pdf.

²⁶ Office of the Auditor General of Ontario, *Annual Report* (2005), c. 3.02, 35–59.

²⁷ Office of the Auditor General of Ontario, *Annual Report* (2007), c. 4.02, 336–43, accessed November 13, 2013, http://www.auditor.on.ca/en/reports_en/cn07/402cn07.pdf.

²⁸ Office of the Auditor General of Ontario, *Annual Report* (2010), c. 3.05, 132–63, accessed November 13, 2013, http://www.auditor.on.ca/en/reports_en/cn10/305cn10.pdf.

²⁹ Office of the Auditor General of Ontario, *Annual Report* (2012), c. 4.05, 349–57, accessed November 13, 2013, http://www.auditor.on.ca/en/reports_en/cn12/405cn12.pdf.

³⁰ Office of the Auditor General of Ontario, *Annual Report* (2010), c. 3.05, 135 and 144, accessed November 13, 2013, http://www.auditor.on.ca/en/reports_en/cn10/305cn10.pdf.

³¹ Office of the Auditor General of Ontario, *Annual Report* (2012), c. 4.05, 352.

³² Office of the Auditor General of Ontario, *Annual Report* (2005), c. 3.02, 56–8.

³³ Office of the Auditor General of Ontario, *Annual Report* (2007), c. 4.02, 342–3.

³⁴ The base hospital system reorganization resulted in a reduction in the number of base hospitals, from 21 to eight regional systems (seven land, one air). Realized realignment goals include enhancing patient care through improving efficiency and standardization across base hospitals (e.g., having one set of medical directives used across the province, the introduction of technology and treatments across the province in a timely manner, etc.).

³⁵ AOGO, *Annual Report* (2010), c. 3.05, 132–63, accessed November 13, 2013, http://www.auditor.on.ca/en/reports_en/cn10/305cn10.pdf.

while they waited to hand off a patient to nurses or until an ED bed became available; these events were linked to fewer or no ambulances being available to respond to new emergency calls.³⁶ The 2012 follow-up report identified multi-pronged MOHLTC progress on these issues.

The same 2010 report identified inconsistencies between the way paramedics and EDs applied triaging guidelines³⁷; the Auditor attributed this in part to outdated training for paramedics.³⁸ The 2012 follow-up report described how MOHLTC addressed the issue: by drafting a pre-hospital Canadian Triage and Acuity Scale (CTAS) Paramedic Guide to “support paramedics in assigning, communicating and documenting the appropriate CTAS levels.” It is not clear whether MOHLTC has finalized and distributed the document.

The Auditor originally made recommendations related to non-emergency patient transfers in 2000. The Auditor noted that missed appointments for diagnostic tests may delay patient treatment.³⁹ A follow-up report in 2002 noted that MOHLTC had initiated work on the matter. A 2005 Auditor’s report found that MOHLTC needed to take additional action to determine whether patient transfers between institutions were being appropriately and cost-effectively handled. MOHLTC continued to work on the issue and, in 2007, the Auditor reported that discussions were in progress with MTO.⁴⁰

HPRAC’s Criteria

OPA’s application for the self-regulation of Ontario’s paramedics was assessed against HPRAC’s criteria for regulation under the RHPA.⁴¹

The **primary criterion** addresses whether the health profession seeking regulation poses a risk of harm to the health and safety of the public. The criterion acts as a gating mechanism: the applicant must present a solid, evidence-based argument, based on a preponderance of evidence, that there is a risk of harm to the public before its application moves to the next level.

Once an applicant meets the primary criterion threshold, it is then assessed on the extent to which it meets the **secondary criteria**. HPRAC applies the secondary criteria to determine whether regulation under the RHPA is the most appropriate course of action or whether another approach to risk mitigation would have a better outcome. This level of assessment focuses on profession-specific factors and assesses whether regulation under RHPA is, in fact, the best way to protect the public.

³⁶ Ibid., 136.

³⁷ All EDs in Canada utilize the same triaging standards, and triage levels are reported to the Canadian Institute for Health Information (CIHI). CTAS is a tool that enables EDs to prioritize patient care requirements and manage care delivery. See, for example, information provided by the Canadian Association of Emergency Physicians, <http://caep.ca/resources/ctas>, accessed December 17, 2013.

³⁸ Ibid., 135.

³⁹ Office of the Auditor General of Ontario, *Special Report on Accountability and Value for Money (2000)*, c. 3.09, 176, accessed November 13, 2013, http://www.auditor.on.ca/en/reports_en/en00vfm/309en00vfm.pdf.

⁴⁰ Office of the Auditor General of Ontario, *Annual Report (2007)*, c. 4.02, 338, accessed November 13, 2013, http://www.auditor.on.ca/en/reports_en/en07/402en07.pdf.

⁴¹ See Volume 2 for more information on HPRAC’s criteria and process.

HPRAC's primary criterion is defined in the following way:

The fundamental principle with respect to health profession regulation under the RHPA is the protection of the public from harm in the delivery of health care, premised on the fact that it is in the public interest to do so. As such, it is vital to demonstrate that the health profession seeking regulation under the RHPA poses a risk of harm to the health and safety of the public. The term risk of harm refers to actions where a substantial risk of physical or mental harm may result from the practice of the profession. This criterion is intended to provide a clear articulation of the degree of harm posed by the profession to the health and safety of the public. In addressing the risk of harm in this context, the applicant is asked to identify the risks associated with the practice of the profession concerned, as distinct from risks inherent in the area of health care within which the profession operates.⁴²

An Evidence-Based Approach

As part of HPRAC's deliberations and processes, and in keeping with the Minister of Health and Long-Term Care's requirements on decision-making, HPRAC uses an evidence-based approach when formulating its recommendations for the Minister's review. Applicants for regulation under the RHPA must provide different types of evidence to inform the decision-making process. The type of evidence required will differ based on which criteria the proposal is addressing. To help applicants fulfill this requirement, HPRAC's criteria and process document⁴³ groups the types of evidence needed into a number of subject areas: research, knowledge/information and economics. Examples are provided for each area so that applicants clearly understand how to support their application. These examples include empirical evidence from randomized control trials and other trials; analytic studies, such as cohort or case control studies; time series analyses; anecdotal evidence; qualitative evidence; before and after studies; surveys; the results of consultation processes with networks/groups; expert knowledge; grey literature; and financial sustainability studies. HPRAC thoroughly considers and weighs all the evidence presented.

⁴² HPRAC, *Regulation of a New Health Profession under the Regulated Health Professions Act (RHPA), 1991: Criteria and Process*,

http://www.hprac.org/cn/projects/resources/RegulatingaNewProfession_CriteriaProcess_Nov2011.pdf.

⁴³ Ibid.

Chapter III: What We Heard

For all referrals, HPRAC engages in broad-based consultation that seeks stakeholder input to help develop its recommendations to the Minister of Health and Long-Term Care. Upon receipt of this referral from the Minister, HPRAC began determining relevant public interest concerns and questions and attempting to understand all perspectives on the issue, including those of key health care practitioners, other affected health care professionals, clients, patients, advocates and regulators. The issue then proceeded through a multi-stage process in which information and responses were both requested from and shared with stakeholders.

Consultation Program

HPRAC conducted an extensive public consultation program from April 8 to July 8, 2013. To ensure that the broader community of interest had the opportunity to participate in this referral, HPRAC asked a number of groups/organizations and individuals to comment on the issue, including:

- Regulatory health colleges
- Regulated health profession associations
- Regulated health care professionals
- Academics and subject matter experts with an interest and/or expertise in the regulation of health professions
- Organizations/groups with an interest in the regulation of health professionals, paramedics and EMAs, and other relevant issues
- Local health integration networks (LHINs)
- The public

HPRAC's goal for the consultation process was to uncover both broad themes and unanticipated issues — not to create a quantitative source of stakeholder interests or concerns.

HPRAC's website was the main communications vehicle for the consultation process. A paramedic and EMA web page⁴⁴ was established as a repository for relevant background material. The page included a link to an online survey, through which the public was invited to express their views on a series of questions related to risk of harm and public interest concerns. The survey questions were based on HPRAC's process and criteria guide.⁴⁵ Participants were asked, among other things, whether the applicant had demonstrated with evidence that it is in the public interest that paramedics and EMAs be regulated; whether paramedics and EMAs pose a risk of harm to the health and safety of the public; and whether self-regulation is appropriate for the profession.

⁴⁴ HPRAC, *Regulation of Paramedics/Emergency Medical Attendants under the Regulated Health Professions Act, 1991*, accessed November 28, 2013, <http://hprac.org/en/projects/Paramedics.asp>.

⁴⁵ See HPRAC, *Regulation of a New Health Profession under the Regulated Health Professions Act (RIIPA), 1991: Criteria and Process*, or Volume 2. See Appendix B for consultation questions.

For the paramedic referral, HPRAC published a link to an online survey on its website and stakeholders either accessed the survey through this portal, sent a copy of the completed survey to HPRAC's office or provided their views in a letter. By the close of the consultation period, 444 stakeholders made submissions to HPRAC; on two occasions, a single stakeholder provided two submissions.

Many of the submissions were provided by members of the paramedic profession; others were submitted by other non-regulated health professionals, regulated health professionals or members of the public. Submissions were also provided by professional associations (8), regulatory colleges (4), labour unions (2), the base hospital program (2) and other interested organizations (4).

Views on regulation were fairly evenly split between survey participants. Approximately 55% indicated that it would be in the public interest that paramedics and EMAs be regulated under the RHPA; a similar percentage of responders indicated that "the OPA has demonstrated convincingly that regulation under the RHPA is appropriate for the profession." Just under half of the responders indicated that paramedics and EMAs pose a risk of harm to the health and safety of the public if the profession is not regulated. (Tables 1 and 2 outline participants' responses to survey questions on HPRAC's primary and secondary criteria. HPRAC considered the following information as it relates to the criteria in order to better understand trends and themes, and not as quantitative data.)

Table 1. Survey Questions and Responses Related to HPRAC's Primary Criterion

Has the OPA demonstrated convincingly that it is in the public interest that paramedics and EMAs be regulated under the RHPA?			
	Number (percentage) of "yes" responses	Number (percentage) of "no" responses	Total
Individuals	229 (53%)	186 (43%)	415 (97%)
Organizations	8 (2%)	6 (1%)	14 (3%)
Total	237 (55%)	192 (45%)	429 (100%)
Has the OPA demonstrated with evidence that paramedics and EMAs pose a risk of harm to the health and safety of the public if the profession is not regulated under the RHPA?			
	Number (percentage) of "yes" responses	Number (percentage) of "no" responses	Total
Individuals	199 (46%)	216 (50%)	415 (97%)
Organizations	9 (2%)	5 (1%)	14 (3%)
Total	208 (48%)	221 (52%)	429 (100%)

Table 2. Survey Questions and Responses Related to HPRAC's Secondary Criteria

Has the OPA demonstrated convincingly that regulation under the RHPA is appropriate for the profession?			
	Number (%) of "yes" responses	Number (%) of "no" responses	Total
Individuals	231 (54%)	184 (43%)	415 (97%)
Organizations	8 (2%)	6 (1%)	14 (3%)
Percentage of Total	239 (6%)	190 (4%)	429 (100%)

Support for regulation coalesced around the potential for risk of harm based on paramedics' decision-making and professional activities. Responders who did not support professional regulation also shared these views, however. As well, most survey participants agreed on the autonomy of paramedics when exercising professional judgment and on the sufficiency of education and training upon entry to practice. Some supporters of regulation noted the need to address gaps in interprofessional relationships/care as a motivating factor for regulation. In addition, most consultation participants agreed with the survey statement indicating that the profession "has shown a willingness and a capacity to effectively collaborate with other professions."

Supporters and non-supporters of regulation disagreed on the possible impact of regulation on access to quality care, with supporters indicating that regulation would increase access to care and non-supporters indicating that regulation would not affect that access. The two groups also disagreed on whether self-regulation was the most appropriate regulatory mechanism for the profession, with supporters indicating that regulation under the RHPA was the best regulatory scheme and non-supporters indicating that self-regulation is not the most appropriate way to oversee the profession. Each group also addressed the issue of the non-emergency transportation (NET) industry, with supporters of regulation citing the industry as a threat to public safety and non-supporters describing it as operating outside of the boundaries of paramedicine. With respect to the structural organization of the profession and its representation, both groups also discussed the OPA, involved labour unions and paramedics' employers from a variety of perspectives (e.g., as individual entities, as representatives of the profession, etc.) — sometimes positively, sometimes negatively.

Supporters of regulation had differing ideas about how paramedic self-regulation might best take shape. For example, some supported professional regulation in theory and not as articulated by OPA. These stakeholders supported augmenting the current framework with a regulatory college in order to provide title protection and other regulatory elements. Other supporters believed that removing the current oversight structure and replacing it with a college of paramedics to solely oversee the profession would be the best course of action.

Responders who did not support regulation for paramedics cited the demonstrated strength of the current oversight structure and a lack of evidence regarding risk of harm. They also closely identified with statements suggesting that regulation would add to the complexity of the system without an appreciable improvement in public safety. Some stakeholders interpreted the

application as advocating for an expanded scope of practice; these stakeholders questioned how it would affect the current QA system and whether paramedics have the education and training to support it. Some stakeholders also believed that paramedics should not be candidates for regulation under the RHPA because they do not have a unique body of knowledge and scope of practice and because, through delegation, they are dependent on base hospital physicians.

After the three-month consultation session, a summary of submissions was made publicly available. Stakeholders were then provided with a two-week period in which they could comment on the submissions received.

HPRAC received eight submissions during the second consultation period, including correspondence from the applicant. Dominant themes in the original stakeholder submissions were often addressed (e.g., delegation of controlled acts, the over-regulation of the profession, medical care being provided outside of the base hospital program, lack of evidence, sufficiency of current oversight, etc.). For example, one stakeholder elaborated on the potential benefits to public safety and paramedic training if delegation were permitted between paramedics. Some stakeholders commented on the findings in HPRAC's reference documents related to the referral. Other submissions, including that of OPA, suggested best practices for a paramedic regulatory college.

OPA also discussed its motivation and objectives, both in terms of its role as a professional association and as the applicant for regulation: "At no point in the application does OPA claim to represent all paramedics. The question of self-regulation is much larger than OPA and larger than any individual stakeholder."⁴⁶ OPA also noted that it submitted an application for regulation upon HPRAC's request. Other comments made by OPA addressed entry-to-practice requirements, interprofessional collaboration, the role of the Transitional Council and clarification on the scope of practice and authorization of controlled acts within a self-regulatory scheme ("the scopes of practice for PCP, ACP and CCP would correspond to their current scopes of practice including the same controlled acts they currently perform, but with the latter done under their own registration."⁴⁷)

All responders had the opportunity to elaborate on their views. Table 3 summarizes the key recommendations and themes expressed by consultation participants.

Table 3. Consultation Submissions: Key Recommendations and Themes

Area of Risk	Summary of Comments Supporting Regulation	Summary of Comments Opposing Regulation
Adequacy of oversight	A regulatory college would provide consistent, province-wide oversight. The current model of oversight is too complex. The profession is over regulated.	Oversight (provided by employers, MOHLTC and base hospitals) is robust, effective and comprehensive. Base hospitals play a key role in protecting the public. Paramedics are well

⁴⁶ Letter from Rob Theriault, President, OPA, to HPRAC, August 20, 2013.

⁴⁷ Ibid.

Area of Risk	Summary of Comments Supporting Regulation	Summary of Comments Opposing Regulation
		regulated under the <i>Ambulance Act</i> .
Evidence of risk of harm	Paramedics and EMAs perform controlled acts and other health care activities that involve a considerable potential for harm to the public.	There is no evidence of serious deficiencies under the current framework. Regulation under the <i>Ambulance Act</i> manages any risk of harm; the framework can be leveraged to cover residual risk.
Performing controlled acts under delegation	Paramedics perform controlled medical acts in a unique out-of-hospital environment with little supervision, which lends itself to autonomous decision-making. The current framework hinders the profession in increasing the quality of clinical judgments to better protect the public interest.	Paramedics perform controlled acts on behalf of base hospital physicians through a structured system of delegation including education, quality assurance (QA) and quality improvement (QI) processes. Regulation would not provide additional protection in the performance of controlled acts. The independent scope of practice proposed by the applicant would undermine the current QA system administered by the base hospitals and would be a significant risk to public safety; no evidence was provided that the current education and training support the proposed expanded scope of practice. Paramedic training and practice are highly regulated and incompatible with an independent scope of practice.
Complaints processes	Public accountability is limited; complaints procedures are opaque. The public is unaware of the base hospital program and does not understand how to lodge a complaint about a paramedic. The public is not represented on base hospital oversight committees.	Complaints most often concern operational matters and not clinical matters.

Area of Risk	Summary of Comments Supporting Regulation	Summary of Comments Opposing Regulation
The goal of self-regulation	The leadership's goal of self-regulation is supported by educators, base hospitals and others; the uninformed oppose regulation. Self-regulation will enhance flexibility and system capacity and encourage initiatives such as community paramedicine. The current framework does not recognize the evolution of the profession. Members of the profession are well positioned for regulation (they have access to accredited education programs, national competencies and certification requirements). Unregulated paramedics work for NET companies, putting patients at risk.	OPA does not represent the views of rank-and-file paramedics. Paramedics have not shown a commitment to regulation. Regulation will advance the profession; it will not improve the public good. The very high costs of a regulatory college have not been accurately budgeted. Non-certified paramedics do not belong under the same umbrella as certified paramedics; they fall outside the <i>Ambulance Act</i> and do not perform controlled acts. Self-regulation will function as an additional and unnecessary bureaucratic burden.

HPRAC's Assessment: Consultation Program

Directly and indirectly, and from an impressive number of stakeholders, HPRAC heard of the high regard with which paramedics are held by their peers, and the pride and professional attitude with which individual paramedics approach their profession (e.g., "The CPSO acknowledges the vital role that paramedics play in delivering quality emergency care to patients across the province";⁴⁸ "Paramedics are highly skilled health care professionals who have been trained to work in complex, emergency situations."⁴⁹). These facts may have contributed to a coalescing of opinion on several topics. For example, most consultation participants — regardless of their position on self-regulation — agreed that there is a potential for risk of harm based on paramedics' decision-making and professional activities, and that interprofessional care has been, and will be, a good fit for the profession.

HPRAC's goal was to uncover both broad themes and unanticipated issues — not to create a quantitative source of stakeholder views. Although the fairly even split in opinion (45% of consultation participants did not support regulation) is of interest, it is not conclusive evidence of

⁴⁸ CPSO consultation comment, accessed December 5, 2013, <http://hprac.org/en/projects/resources/PartIIConsultationResultsOtherFormat.pdf>.

⁴⁹ OHA consultation comment, accessed December 5, 2013, <http://hprac.org/en/projects/resources/PartIIConsultationResultsOtherFormat.pdf>.

a lack of support for regulation within the profession. HPRAC noted several themes on both sides of the debate. Non-supporters of regulation noted the strength of the current oversight system and a lack of evidence of risk of harm, and questioned how self-regulation would benefit the public interest and whether the medical care provided outside of the base hospital program by graduates of paramedic educational program should be considered "paramedic" care. Supporters of regulation commented on the complexity of the current system and corresponding limitations on public accountability and processes (e.g., the complaints process), as well as other objectives that are not part of HPRAC's decision-making process, such as the status of the profession and the proportional desirability of self-regulation.

Key Informant Interviews

A number of key informant interviews were conducted in order to identify stakeholders' interests and concerns early in the consultation process. Information was sought via correspondence or through meeting with persons or organizations with an identified expertise or stake in the issue.

In considering the application for regulation of the paramedics and EMAs, HPRAC conducted interviews with the following organizations:

- **Canadian Union of Public Employees (CUPE) Ambulance Committee of Ontario (CACO):** Doug Allan (National Representative, Research); Jeff Van Pelt (Vice Chair, CACO)
- **Central East Prehospital Care Program (Lakeridge Health Base Hospital):** Dr. Rudy Vandersluis (Medical Director); Jim Harris (Manager CQI); Linda Calhoun (Senior Director)
- **College of Physicians and Surgeons of Ontario (CPSO):** Dr. Rocco Gerace, Registrar
- **MOHLTC, Emergency Health Services Branch (EHSB):** Dr. Anthony Campeau (Senior Manager, Operations [now retired]); Mark Hull (Senior Manager, Operations); Rick Brady (Manager, Investigations); Cathy Francis (Manager, Education and Patient Care Standards); Leeanne Colvin (Co-ordinator, Municipal/Provincial Operational Policy, Standards and Liaison)
- **MOHLTC, Health System Accountability and Performance Division:** Catherine Brown (Assistant Deputy Minister); Tamara Gilbert (Director, Implementation Branch); Peter Biasucci (Manager, Acute and Rehabilitative Care); Debra Bell (Manager, Home and Community Care)
- **MOHLTC, Health Workforce Policy Branch:** Jeff Goodyear, Director
- **Ontario Association of Paramedic Chiefs:** J.M. Price (Executive Director)
- **Ontario Base Hospital Group (OBHG):** Rob Burgess (Chair [A]) OBHG Executive); Dr. Jason Prpic (Chair, Medical Advisory Committee); Nicole Sykes (Chair, OBHG Executive)
- **Ontario Hospital Association (OHA):** Melissa Prokopy (Director, Policy, Legislative & Legal Affairs); Navin Malik (Consultant, Physician and Professional Issues); Sudha Kutty (Director, Patient Safety, Physician and Professional Issues)
- **Ontario Paramedic Association (OPA):** Rob Theriault (President); Dr. Michael Fitzgerald (Consultant); Dr. Martin McNamara (Chief of Staff, Georgian Bay General

Hospital, member of OPA self-regulation committee); Chief Mike Nolan, Chief/Director Emergency Services at County of Renfrew, member of OPA self-regulation committee)

- **Paramedic Association of Canada:** Chris Hood (President)
- **Sunnybrook Centre for Prehospital Medicine (Sunnybrook Base Hospital):** Dr. Rick Verbeek (Medical Director); Rob Burgess (Senior Director); Maud Huiskamp (Senior Manager)
- **Toronto Emergency Medical Services:** Larry MacKay, Acting Commander, Professional Standards

HPRAC's Assessment: Key Informant Interviews

HPRAC engaged a wide range of stakeholders to further discuss the referral and, as with HPRAC's consultation program, respect for paramedics and the work that they do was a strong message sent by the stakeholders.

Key informants were generous with the information they provided. HPRAC's research, discussed in Chapter IV, was enriched by this information.

Chapter IV: What We Learned

Three major reviews were completed in support of HPRAC's recommendation. Information from these reviews was made publicly available during the consultation period. For the full text of the reviews, see Volume 2.

Additional research was conducted by HPRAC on a wide range of topics in order to better understand the risk of harm and public interest issues related to paramedics and EMAs in Ontario.

Jurisprudence Review

A jurisprudence review was undertaken in order to gain insight into the legal issues that arise with respect to paramedics in the nine common law provinces in Canada. The review also provided a description of each province's regulatory scheme.

The review was completed in October 2012. It found 38 Canadian cases that were both relevant to this recommendation and that touched upon risk of harm to a patient: seven in Alberta, four in New Brunswick, and one in Saskatchewan, provinces where paramedics are self-regulated⁵⁰; 11 in British Columbia and two in Manitoba, provinces where paramedics are directly regulated⁵¹; and 13 cases in Ontario, where paramedics are indirectly regulated.^{52,53}

Approximately one-third of the cases dealt with negligence in providing care or improperly providing care. Another third dealt with issues related to employment, which sometimes also touched upon the behaviour of paramedics, such as issues concerning the "character" of the paramedic.⁵⁴ The final third of the cases was split between those dealing explicitly with the character of the paramedic (e.g., lying, drinking alcohol, cheating on an exam, etc.) and cases in which there had been incidences of abuse or sexual assault of coworkers or patients.

⁵⁰ Under these schemes, professions regulate themselves through a regulatory college or similar institution, under statute, and in the public interest.

⁵¹ Professions are directly regulated by government through legislation.

⁵² Paramedics in Ontario are indirectly regulated by the *Ambulance Act*. The Act establishes licensing and certification standards for the operators of ambulance services. These operators may only employ paramedics who meet the qualifications under Part III of O Reg 257/00.

⁵³ Variables other than regulatory status, such as provincial population, etc., potentially affect the number of cases in each province.

⁵⁴ The concept of good character, or good moral character, is recognized in the common law as an appropriate requirement for registration with professional bodies as a way to protect the public by maintaining high ethical standards. The requirement that a licensee or registrant be of good character is codified in several Ontario statutes that regulate professions, including the *Law Society Act*, R.S.O. 1990, c. L8, s. 27(2).

HPRAC's Assessment: Jurisprudence Review

Case law from Quebec, and approximately 15 cases from New Brunswick that were reported exclusively in French, were not included in the jurisprudence review because of the difficulties in obtaining legal translations. The 13 Ontario cases occurred within a system of very high paramedic-patient interaction: as mentioned in Chapter II, MOHLTC reports that, in a 12-month period, over 1.9 million requests were made for an ambulance and more than 900,000 transports were completed.⁵⁵ During the consultation program, HPRAC reviewed comments that emphasized the significance of the relatively low number of jurisprudence cases, the high number of practitioners (i.e., over 7,000) and the nature of paramedic practice.⁵⁶ Although the issues of the reviewed cases are problematic, they are not unexpected for health care practitioners, especially considering the vulnerability of the patient population, the incidence of similar cases for regulated health professions and the breadth of the paramedic scope of practice. Based on the evidence available, HPRAC is not able to determine whether self-regulation of the paramedic profession would affect the rate and nature of jurisprudence cases.

Jurisdictional Review

A jurisdictional review was also conducted on the regulation of paramedics in Canadian provinces, some American states, the United Kingdom (UK), New Zealand (NZ) and Australia.

As noted above, paramedics are regulated in some form in each of the reviewed (i.e., the common law) provinces in Canada; however, regulatory schemes vary by province. There is a degree of consistency in paramedic training programs across the country because many of these programs are accredited by the Canadian Medical Association (CMA). Accreditation is based on the profession's National Occupational Competency Profile (NOCP).⁵⁷ The national exam (at both the PCP and ACP levels) is also based on the NOCP. The Paramedic Association of Canada (PAC) estimates that a commonality rate of approximately 96% exists in paramedics' scope of practice across all provinces,⁵⁸ although not all paramedics practise to that standard.

Several American states — New York, California, Colorado, Minnesota and Oregon — were reviewed in greater detail. In general, the states surveyed appear to have a central licensing/registration requirement with a limited capacity to investigate emergency medical personnel and revoke the license/registration for inappropriate conduct. This provides more direct oversight than the current Ontario model, but is notably limited in scope. Volume 2 contains more details on international jurisdictions.

⁵⁵ MOHLTC, "Emergency Health Services Branch Statistics."

⁵⁶ For example, a comment was received from an individual during the two-week post-consultation period.

⁵⁷ NOCP was introduced in March 2000 as a way to define the paramedic profession, promote national consistency in paramedic training and practice, and facilitate labour mobility for practitioners. Competency profiles have been developed for the following levels: Emergency Medical Responder, Primary Care Paramedic, Advanced Care Paramedic and Critical Care Paramedic.

⁵⁸ Personal communication, Chris Hood, President of PAC, December 10, 2012.

In the United States, the EMS workforce includes paid and volunteer emergency medical technicians (EMTs), members of the military, firefighters and employees of commercial ambulance services and other public utilities. The jurisdictional review describes a lack of consistency in the workforce and variability in standards and statutory obligations across the United States. HPRAC received comments during its consultation period that expressed caution about applying data derived from U.S. practice settings to the situation in Ontario. For example,

Some [American EMAs] are strictly volunteer...[who will] arrive by your side in whatever clothes they happen to be wearing in a vehicle stocked with whatever their fund-raising efforts permit them to purchase.... Their call volume may be very low and sporadic, thus not allowing them to be exposed to a variety of pre-hospital incidents and fully develop their skills which can only be honed through exposure and practice. Others have their staff alternate between firefighter and EMT shifts... It is important to note that they cannot properly maintain their medical skills if they are only doing the job half the time.⁵⁹

In the UK, paramedics are not self-regulated; instead, paramedics and EMTs are regulated by the Health and Care Professions Council (HCPC). This council consists of 10 registrant members and 10 lay members, all of whom are appointed by the Privy Council. HCPC directly licenses and certifies emergency medical personnel. The situation is different in Ontario: in this province, ambulance providers are directly regulated and are only allowed to hire paramedics with certain qualifications, which is a form of indirect regulation.

In Australia, the regulation of emergency medical personnel varies by state. Overall, there is limited regulation, although national certification is often required for a paramedic to obtain employment. Based on the review, it is clear that Australia also has less emergency medical personnel regulation than Ontario. In that country, it is up to regional ambulance services to determine the necessary skills and qualifications of emergency medical personnel.

New Zealand does not currently regulate emergency medical services. However, in June 2011, an application was submitted to regulate paramedics under the *Health Practitioners Competence Assurance Act* (HPCAA). The HPCAA was also under review, though, and consideration of the application for paramedic regulation is pending completion of that review. The legislative review is currently ongoing.

HPRAC's Assessment: Jurisdictional Review

The information in the jurisdictional review provided an important context for understanding paramedic practice in other regions. Oversight of the health professions, including self-regulation, is not standardized in Canada or internationally. Regulatory options include completely autonomous self-regulation, direct government control and no formal regulation. In Canada, oversight characteristics vary from province to province. Overall, they take into account regional differences, the evolution of the profession and the evolution of each province's regulatory scheme.

⁵⁹ Comment submitted to HPRAC by a private citizen during the two-week period following consultation, July 21, 2013.

Literature Review

A literature review on the paramedic profession was conducted in two parts: Part 1 examined evidence related to patient safety, and Part 2 provided more jurisdictional information on the practice of the profession as well as information on IPC and community paramedicine.

Part 1's findings cautioned that "the studies, programs, and findings presented... may originate from jurisdictions with health systems that are significantly different from Ontario's." The jurisdictional review also described the lack of consistency in the workforce and variability in standards and statutory obligations across the United States. As noted above, stakeholder comments also suggested caution when evaluating the data vis-à-vis its applicability to Ontario.

In addition, Part 1 described the literature on EMS and patient safety, especially with respect to quantitative data, as being limited. As a result, the literature review presented qualitative data on patient-safety risks.

Various studies described the practice setting as chaotic, dangerous, pressure-filled and unfamiliar; one set of authors noted that "EMS providers work in perhaps the least ideal physical and emotional environment, creating a milieu ripe for patient harm."⁶⁰ These studies echoed what HPRAC heard during key informant interviews, which also identified an important and unique part of paramedic practice (see Chapter II), as "scene management"⁶¹: the way in which paramedics are exposed to changeable and dangerous situations where patients have to be managed and often require critical care. In addition to requiring technical health care skills, paramedics must have enhanced cognitive skills to deal with both the physical environment and the social environment. The pre-hospital setting differs greatly from the environment in which many EMS patients would otherwise receive care, such as emergency departments and intensive care units. The literature review also highlighted several risks to patient safety in this challenging setting, and sorted these risks into two camps: high-level contextual factors (e.g., scope of practice, training), and risks associated with patient safety at the point-of-care (e.g., medical errors, ambulance collisions).

The review identified one report, *Patient Safety in Emergency Medical Services*,⁶² that described a three-phase project related to patient safety issues in EMS. The project was led by the Emergency Medical Services Chiefs of Canada (EMSCC), the Calgary EMS Foundation and the Canadian Patient Safety Institute (CPSI). A systematic review of the literature, qualitative interviews with key informants and a roundtable "brainstorming" event led to the following conclusions:

⁶⁰ Bigham et al., "Patient safety in emergency medical services: a systematic review of the literature," *Prehospital Emergency Care* 16(1) (2012): 20-35.

⁶¹ Anthony Campeau, "A Space-Control Theory of Paramedic Scene Management" (PhD Diss., University of Toronto, 2007).

⁶² Canadian Patient Safety Institute (CPSI), *Patient Safety in Emergency Medical Services: Advancing and Aligning the Culture of Patient Safety in EMS*, 2009, accessed December 4, 2013, <http://www.patientsafetyinstitute.ca/English/research/commissionedResearch/patientSafetyinEMS/Documents/Patient%20Safety%20in%20EMS%20Full%20Report.pdf>.

- The topic has been poorly studied and the literature specifically lacks the complex research that would yield significant improvement opportunities for patient safety in EMS;
- Along with a need for quality research, enhanced IPC is essential as a building block to improve pre-hospital patient safety; and
- Experts identified clinical judgment and decision-making as a significant patient safety issue, with 95% of attendees rating it as highly important.

The group also identified the impact of “scope creep” on the EMS role. More and more, EMS personnel are caught between their historical role of “stabilize and transport” and an increasingly complex clinical role. Assuming that this trend intensifies as EMS processes, interventions and technology evolve and further align with the health sector, the group identified the need for a change in EMS education, to develop better clinical decision-making and interprofessional skills.

The report also noted the high level of consistency between EMS personnel and physicians in the identification of major factors influencing patient safety, such as clinical decision-making and the EMS’s “focus and relationship with healthcare.”⁶³ Despite the natural differences in perspectives of the two groups, the confluence of ideas supports the notion that paramedics and physicians share an important, and professional, approach to the delivery of pre-hospital emergency health care.

Like Part 1, Part 2 of the literature review also outlined the importance of enhancing IPC as a way to effectively address patient safety. In particular, Part 2 identified studies that described the issue of information loss during patient handover; it also noted potential solutions to the issue, such as using structured processes, involving appropriate and experienced personnel and improving multidisciplinary education.

Part 2 also described the changing focus of EMS in the context of an expanding paramedic scope of practice, both in Canada and internationally. It identified studies that described an associated risk and that focused on the need for more evidence-based practices, increased paramedic decision-making ability (in terms of determining the necessity of medical transport) and enhanced patient safety. The review also described the increased paramedic decision-making authority and engagement in community paramedicine-type activities in terms of its benefits to the health care system.

HPRAC's Assessment: Literature Review

The quantitative data were limited; Part 1 of the literature review, for example, only presents qualitative data on the risks to patient safety that were examined in the review. As well, because of jurisdictional differences, some studies are not directly relevant to Ontario. The applicable evidence indicates that providing scene management while delivering pre-hospital emergency health care poses unique patient-safety challenges and risks. For example, the literature persuasively describes ongoing pressures on the outer limits of paramedics’ scope of practice,

⁶³ Ibid.

and an education/training system that may not be keeping pace. It also describes risks related to paramedics' decision-making while delivering care. Improving IPC presents an opportunity to, among other things, address patient safety.

Current Protective Measures

Regulation Through MOHLTC

In Ontario, the objective of self-regulation is to "protect the public from incompetent and unqualified individuals and to promote informed consumer choice through a system of scope of practice statements, controlled acts, protected titles, standards of practice and complaints and discipline processes."⁶⁴

As HPRAC observed in its report on the regulation of physician assistants,⁶⁵ the UK's Department of Health identifies the dimensions of risk that can be used to inform decisions on its management:⁶⁶

- Whether the act is carried out by a professional on their own, or as part of a supervised team who can support, guide and scrutinize practice;
- Whether the act is carried out by a professional who is part of a well managed organization that has in place managerial assurance systems to protect patients and the public;
- Whether the act is carried out by a professional who has a stable employment pattern, where any problems might be identified over time, or whether it is carried out by a more mobile short tenure practitioner working in a variety of locations, whose practice is less likely to receive consistent oversight;
- The quality of education and training of the practitioner carrying out the act;
- The experience of the practitioner carrying out the act; and
- Whether there are systems in place to ensure that the practitioner is regularly and effectively appraised and developed to ensure that they are up to date with current practice.

Paramedics in Ontario are regulated by MOHLTC EHSB under the *Ambulance Act*. The Act governs the ambulance service in Ontario, including the people who provide the service. It sets out the responsibilities of the province (via EHSB) in the administration and enforcement of the legislation governing ambulance service provision as well as the responsibilities of upper-tier

⁶⁴ HealthForceOntario, *Health Human Resources Toolkit*, April 2007, 1, accessed November 28, 2013, <http://www.healthforontario.ca/UserFiles/file/PolymakersResearchers/hhr-toolkit-april-2007-cn.pdf>.

⁶⁵ HPRAC, *The Health Profession Assistant: Consideration of the Physician Assistant Application for Regulation*, August 2012.

⁶⁶ Department of Health (United Kingdom), Extending Professional Regulation Working Group, *Extending Professional and Occupational Regulation: the Report of the Working Group on Extending Professional Regulation* (2009), accessed November 28, 2013, http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_102824.

municipalities and other delivery agents who operate the day-to-day ambulance service.⁶⁷ Registration criteria, entry-to-practice requirements and standards of practice are set by the EHSB in collaboration with municipal EMS providers and base hospital medical directors.

Paramedics are also overseen by their employer (the municipal EMS provider) and Ontario's base hospital program through agreements and other processes; these are examined below.

Entering Practice and Maintaining Practice Proficiency

Ontario has three levels of paramedic, with each level building on the competencies and skills of the prior level and assuming its scope of practice.⁶⁸ Entry-to-practice requirements, and the ongoing requirements of practice, are well established, and working as a paramedic at any level entails fulfilling several statutory requirements. Although MOHLTC sets standards for the education, evaluation, continuing medical education (CME) and ongoing competency assessment of paramedics,⁶⁹ base hospitals also play an important role in ensuring initial and ongoing competence.

Approved Educational Programs

According to OPA, all paramedic educational programs in Ontario are approved by MOHLTC⁷⁰; as well, 38% of educational programs offering PCP programs and 100% of educational programs offering ACP programs are accredited by the Canadian Medical Association (CMA).⁷¹ CMA accreditation in Ontario and other provinces is based on the NOCP for paramedicine, which ensures a high degree of consistency across provinces. OPA notes that most Canadian paramedic education programs are based on the NOCP, even if they are not CMA accredited.⁷²

Mandatory Exam

Paramedics are required by legislation to pass a comprehensive provincial exam set by MOHLTC — the Advanced Emergency Medical Care Assistant (A-EMCA) exam — as a pre-employment qualification. An A-EMCA certificate is required for practice in Ontario and only candidates who have recently completed an approved paramedic training program or have successfully completed the Ontario Equivalency Process⁷³ are eligible to write the AEMCA exam.⁷⁴ The exam is based on the Basic Life Support (BLS) Patient Care Standards and the

⁶⁷ *Ambulance Act*, Parts III and IV.

⁶⁸ OPA application, 4.

⁶⁹ MOHLTC, *Regional Base Hospital Performance Agreement*, 2008, Appendix M, 51.

⁷⁰ OPA application, 23.

⁷¹ *Ibid.*, 25.

⁷² *Ibid.*, 26.

⁷³ MOHLTC assesses the credentials of paramedics from other jurisdictions who want to practise in Ontario through the Paramedic Equivalency Process.

⁷⁴ MOHLTC, "Paramedic Education and Certification, Questions and Answers."

Advanced Life Support (ALS) Patient Care Standards, as well as the MOHLTC Pre-Hospital Care Syllabus.^{75,76}

Certification

There are two additional requirements in Ontario: an offer of employment by a municipal EMS provider, followed by certification by the medical director of the base hospital with which the paramedic would be affiliated. This additional certification permits paramedics to perform controlled acts when working for the municipal EMS provider. Paramedics who are not employed by the municipal EMS provider cannot obtain this additional certification.⁷⁷ The base hospitals' certification process is referenced in the agreement between it and MOHLTC. This agreement confirms "the education and standard of practical skills necessary for certification and delegation of specific controlled acts approved by the Provincial Medical Advisory Committee (PMAC) to Emergency Medical Attendants and Paramedics."⁷⁸ MOHLTC retains oversight: again, as specified in the performance agreement between MOHLTC and the base hospital, an MOHLTC representative "may inspect the outcome of any education program or competency evaluation process provided by the Base Hospital Program to any...Paramedic, review patient care documentation, and any other relevant files or information of each person associated with or receiving services from a Host Hospital at any reasonable time."⁷⁹

To maintain certification, paramedics must complete an annual recertification process through their base hospital. The overall objectives of recertification are the same as those for initial certification: to ensure competence to practice. Recertification permits the paramedic to continue to perform controlled acts through delegation by the base hospital physician. HPRAC has learned that the base hospital program is currently engaged in a standardization exercise for its entry-to-practice certification, as well as its yearly certification.⁸⁰

Continuing Medical Education (CME)

The performance agreements between MOHLTC and the base hospitals also impose a requirement on these institutions to provide a CME program in order to maintain paramedics' skills and critical thinking and to strengthen their knowledge base, in accordance with the basic or advanced life-support patient-care standards.⁸¹ Paramedics must take a set number of CME hours on a yearly basis in order to maintain their certification. Clinical courses are offered by the

⁷⁵ The MOHLTC *Pre-Hospital Care Syllabus* sets out the theory and the performance skills upon which paramedic candidates will be evaluated. See http://www.health.gov.on.ca/english/public/program/ehs/cdu/pdf/pcp_syllabus.pdf, accessed December 4, 2013.

⁷⁶ MOHLTC, *Advanced Emergency Medical Care Assistant Examination: Study Guide and Sample Questions* (February 2010), v. 3.5, 1, accessed December 4, 2013, http://www.health.gov.on.ca/english/public/program/ehs/cdu/pdf/aemca_study_en.pdf.

⁷⁷ OPA application, 1fn.

⁷⁸ MOHLTC, *Regional Base Hospital Performance Agreement*, 2008, Appendix M, 51.

⁷⁹ *Ibid.*

⁸⁰ OBHG presentation to HPRAC, June 12, 2013.

⁸¹ MOHLTC, *Regional Base Hospital Performance Agreement*, 2008, 1.0: Definitions, 2.

base hospital; operational courses are offered by the municipal EMS provider. The number of hours of required courses varies by paramedic level. OPA reports that PCPs must complete 24 to 40 hours of courses; ACPs must complete 40 to 80 hours; and CCPs must complete more than 80 hours.⁸² The base hospitals have advised that an increase in annual minimum CME requirements will be proposed to address limitations related to paramedics' scope of practice and educational preparation.⁸³

The Base Hospital Program

The Minister of Health and Long-Term Care has designated eight regional base hospitals (seven land, one air) to provide leadership and direction on aspects of ambulance-based pre-hospital emergency health care. Each base hospital is housed in a "host" hospital in its region and delivers its program centrally. Each base hospital is responsible for ensuring that the pre-hospital health care delivered in its jurisdiction meets the needs of the local community; the base hospitals also work together as integrated components of a provincial network. This program has been providing pre-hospital medical oversight for over 30 years.

Each base hospital program has a framework within which its regional medical director provides guidance and medical advice, quality assurance and related advice, advanced care skills training and certification.⁸⁴ Policies and protocols are established specifically to enable delegation to paramedics in accordance with legislated requirements and regulations, standards, CPSO policy and provincial guidelines. The policies and protocols are updated from time to time to reflect changes that arise from these sources.

Delegation

The RHPA is based on a controlled acts model that assumes that some health care procedures have a more significant risk of harm than others. Section 27(2) of the RHPA lists 13 procedures that, if not performed correctly and by a competent practitioner, have a high degree of inherent risk. These procedures are known as "controlled acts," and the controlled acts model identifies the existence of risk in a particular act. In Ontario, controlled acts may only be performed by authorized health care professionals. Under certain circumstances, however, these acts may be delegated to other regulated or unregulated individuals who are not authorized health care professionals.

Delegation in Ontario is a standard tool used by physicians and some other regulated health professionals to efficiently deliver health care; all parties are subject to the rules of their regulatory college and delegating physicians, for example, are subject to the related guidelines, standards and regulations of the College of Physicians and Surgeons of Ontario (CPSO). Often, delegation takes place within a small circle of health care providers. Currently, the performance of controlled acts under delegation is a key part of paramedic practice in this province.

⁸² OPA application, 33.

⁸³ Letter from OBHG to HPRAC, July 7, 2013.

⁸⁴ "Base hospital program" is defined in s. 1(1) of the *Ambulance Act*.

Delegation to paramedics, however, is on a different scale than the delegation of controlled acts that takes place routinely within Ontario's health institutions: one regional medical director delegates authority to all paramedics within a base hospital's jurisdiction.

Medical Directives

In order to help bridge the gap between a physician's clinical decision-making and the realities of paramedic practice, medical directives⁸⁵ contain a series of narrow decision-making steps, in the form of indications and contraindications, for paramedics to follow. These steps result in a specific intervention.⁸⁶ Medical directives are the means by which the regional medical director delegates the authority to perform a controlled act; they are the way in which each paramedic is authorized, in advance, to perform controlled acts' procedures when appropriate, without a direct assessment by a physician.⁸⁷ This series of steps is also known as off-line medical control.

There are many variables to consider when medical directives are created or updated outside of the base hospital program. There are additional considerations within the base hospital program for medical directives crafted solely for paramedics. The Base Hospitals Medical Advisory Committee (MAC) has described some of these considerations: the variable scopes of practice of paramedics; the potential frequency of use of the particular treatment; the invasiveness of the intervention; the availability of base hospital physicians; and the amount of actual involvement of base hospital physicians when an intervention is being undertaken by a paramedic.⁸⁸

Paramedics are not expected to treat patients outside of medical directives. The directives set out the limits of paramedics' scope and knowledge, and indicate when a situation requires verbal contact with a base hospital physician through "patching" (see "Patching," below).

Added Flexibility

A degree of flexibility has been built into the delegation between a medical director and a paramedic. According to the legislation, different levels of paramedics may perform different controlled acts, with each level building on the previous one.⁸⁹ The legislation also permits medical directors to authorize additional controlled acts to lower-level paramedics.⁹⁰ Considering the realities of paramedic practice, including paramedics' skill set and training, and the ability of physicians to delegate without additional limitation to non-paramedics, this flexibility is required both to ensure patient safety and to optimize the delivery of health care.

⁸⁵ Medical directives are written, specialized instructions from certain regulated health professionals with ordering authority (including physicians) that permit the performance of a controlled act procedure by another. See the Federation of Health Regulatory Colleges of Ontario, *An Interprofessional Guide on the Use of Orders, Directives and Delegation for Regulated Health Professionals in Ontario*, accessed December 5, 2013, <http://mdguide.regulatedhealthprofessions.on.ca/orders/what>.

⁸⁶ *Ibid.*

⁸⁷ *Ibid.*

⁸⁸ Email from Rob Burgess, Acting Chair, OBHG Executive, to HPRAC Secretariat, July 8, 2013.

⁸⁹ O Reg 257/00, scheds. 1, 2, 3.

⁹⁰ O Reg 257/00, scheds. 2, 3.

Patching

To further support paramedics, the base hospitals have developed a system whereby paramedics are permitted to “patch” by voice with an emergency physician to discuss the case and the patient, and then collaboratively decide on the intervention.⁹¹ Over time, as paramedics across the region regularly patch in, some interventions become more routine and are recognized as such. From a historical perspective, and in general, medical directives codify the repeat patches of previous years.

Patching is also known as online medical control. For logistical reasons, it is typically used when only a few patients are being transported, the interventions are high risk and infrequently utilized and when medical directives do not extend to the given situation. (Offline medical control is best utilized when interventions are low risk and frequently utilized, and when base hospital physicians cannot be reached quickly.) Table 4 shows the number of patches that took place in Ontario over one 12-month period; in the same time period, and as described in Chapter II, MOHLTC reported over 1.9 million requests for an ambulance and more than 900,000 completed transports.

Table 4. Patches Within Each Base Hospital Over a 12-Month Period*

Base Hospital	Number of Patches
West	~3000
Northwest	202
Southwest	1,600
Northeast	369
Central East	1,729
Eastern Ontario (RPPEO)	2,378
Sunnybrook	4,994
Ornge	5,389

*Total number of patches within the land base hospital system = 14,271 (39 per day); total number of patches within the air ambulance system = 5,389 (15 per day).

Higher-level paramedics, who have advanced knowledge, experience and skills, are subject to a greater degree of oversight; OPA has observed that:

the lower the level of care, the greater the autonomy. For example, PCPs deliver care entirely under standing orders, as is the case for almost all of the care that ACPs deliver. Only a small percentage of the care delivered by ACPs involves obtaining a verbal order by patching to a Base Hospital Program physician, although in the event of a communication failure the ACP

⁹¹ Email from Rob Burgess, Acting Chair, OBHG Executive, to HPRAC Secretariat, July 8, 2013

can provide care within their scope if they deem it to be in the best interest of the patient. CCPs provide the highest level of complex care and are routinely in contact with a Base Hospital physician for consultation and verbal orders as needed.⁹²

The Municipal EMS Providers

At the local level, the actual delivery of ambulance services is managed by the 53 municipal EMS providers. The Ontario Association of Paramedic Chiefs (OAPC) describes the responsibilities of the municipal EMS providers as:⁹³

- Establishing governance mechanisms and the organizational structure that will manage the local ambulance system;
- Developing short- and long-term plans for meeting the needs of the municipality;
- Determining whether to deliver the services directly or in a contracted relationship with a third party, and if so, managing contracts with these parties;
- Ensuring the supply of vehicles, equipment, services and information necessary for the proper provision of ambulance services;
- Ensuring the training and supervision of staff, maintenance of vehicles and equipment, the provision of a quality assurance program; and
- Ensuring that service levels and quality are maintained, as is compliance with the legislated land ambulance service standards.

Roles, Accountability and Cooperation

The roles of EHSB, the base hospitals and the municipal EMS providers are described in legislation and understood in practice. MOHLTC is responsible for the *Ambulance Act* and EHSB administers and enforces it, including its quality assurance and certification directives. The base hospitals also certify paramedics and, additionally, delegate controlled acts, provide expertise, assure the quality of paramedic activities and support the continuing education of paramedics. The municipal EMS providers participate in aspects of these activities and also oversee operational issues.

The system addresses the accountability of not only paramedics but the oversight partners as well, at various levels. Base hospitals, for example, function in an advisory capacity to MOHLTC. Each base hospital commits to a performance agreement with EHSB that describes its obligations and responsibilities vis-à-vis assisting MOHLTC in ensuring the quality of ambulance-based pre-hospital care. In addition to meeting its own objectives, base hospitals also commit to helping MOHLTC move “towards the accomplishment of [EHSB] objectives.”⁹⁴ Base hospitals are also required to regularly report back on key performance indicators related to

⁹² OPA application, 18-19.

⁹³ OAPC, *EMS in Ontario Today*, accessed November 7, 2013,

https://emsontario.ca/cms/index.php?option=com_content&view=article&id=105&Itemid=57.

⁹⁴ MOHLTC, *Regional Base Hospital Performance Agreement*, 2008, 2.0; Introduction, 5.

medical oversight, continuous quality improvement and other deliverables.⁹⁵ As well, every three years, each base hospital program is comprehensively reviewed by EHSB to assess whether it is fulfilling the performance agreements' obligations.

Base hospitals are further required to develop an organizational framework that encourages cooperation across oversight parties and across the various base hospitals in Ontario. The performance agreement mandates the formation of various pan-provincial or regional advisory committees. Some committees are mandated to report to MOHLTC (e.g., the provincial Medical Advisory Committee [MAC], which advises on medical issues and the role of the base hospital; and the Ontario Base Hospital Group (OBHG) Executive, which advises on all matters relating to the care provided by paramedics and makes recommendations related to leadership administration, operations, funding and program delivery).⁹⁶ Other committees are mandated to report back within the base hospital program (e.g., the Quality of Care Advisory Committee, which assists the base hospitals in monitoring the quality of pre-hospital medical care in the region⁹⁷). All provincial committees include front-line paramedics (i.e., MAC, the Data Management Sub-Committee, the Education Sub-Committee and the Quality Management Sub-Committee).⁹⁸

A "super-committee," the Base Hospital Program Committee, accepts the reports of the Quality of Care Advisory Committee and other committees. In reporting to the host hospital's board of directors, the Program Committee "ensures that the key goals, vision and mission of the Base Hospital Program are consistent with the direction of the Minister, the policies of the Host Hospital, and the needs of the Emergency Medical Services System Stakeholders."⁹⁹ Members of the committee include representatives from the base hospital program, delegating physicians, the municipal EMS provider, hospitals and EHSB. Representatives of the region's local health integration network (LHIN) may also be committee members.

The performance agreement between EHSB and each base hospital also specifies that the base hospital must establish a separate agreement with each municipal EMS provider to clarify such things as the hospitals' responsibilities vis-à-vis the delegation of controlled acts and its intention to monitor/evaluate/improve patient care provided by paramedics through a continuous quality improvement program.

The ambulance services provided by the municipalities also undergo certification and review by EHSB according to regulations and standards. EHSB's program utilizes peer review, and EHSB has described the program as containing "many characteristics of accreditation, inspection and compliance review."¹⁰⁰ The municipal EMS providers are required to report back to MOHLTC

⁹⁵ MOHLTC, *Regional Base Hospital Performance Agreement*, 2008; Letter from OBHG to HPRAC, June 12, 2013.

⁹⁶ Memo from OBHG Executive to Ontario Paramedics, January 27, 2011, accessed December 5, 2013 http://www.lhsc.on.ca/About_Us/Base_Hospital_Program/2011ParamedicRepresentativeRecruitment.pdf.

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ MOHLTC, *Regional Base Hospital Performance Agreement*, 2008, Appendix A: Base Hospital Program Committee, Terms of Reference.

¹⁰⁰ MOHLTC, "Emergency Health Services Branch Statistics."

on the financial aspects of pre-hospital emergency care delivery. Each municipality submits a financial-planning report, audited financial statements and a document that confirms that MOHLTC funding was used appropriately; additional and related reporting requirements are currently being negotiated and are expected to be in place at the start of the next fiscal year.¹⁰¹

The municipal EMS providers also participate in a province-wide initiative, the Ontario Municipal Benchmarking Initiative (OMBI),¹⁰² to benchmark best practices in providing various municipal services, including aspects of EMS delivery. Measurement indicators have been developed and are continuously reviewed for improvement, in order to compare the performance of EMS operators. OMBI's 2012 performance measurement report provided data from 13 municipalities on:

- The number of EMS calls responded to;
- The length of time between when a call is received and when it is dispatched to an EMS unit;
- The length of time between when a call is received by an EMS unit and when the unit arrives on the scene;
- The time ambulances spend at the hospital;
- The number of hours of ambulance service provided in the community; and
- The hourly cost of providing ambulance service.

The various agreements between EHSB, the base hospitals and the municipal EMS providers are not required to be made publicly available. However, the Corporation of the County of Bruce has posted its Memorandum of Understanding (MOU) with its base hospital at the London Health Sciences Centre on its website.¹⁰³ This MOU states that one of its foundational purposes is to "provide an environment of collaborative and cooperative communication between the Base Hospital and the Service Provider"¹⁰⁴; it also states a commitment to continuous quality improvement and evidence-based practice. In that jurisdiction, delegation policies and protocols are to be reviewed and discussed within the Base Hospital Regional Program Advisory Committee; the regional medical director retains final decision-making powers and responsibility. Local medical directors are to provide opportunities for communication at the local level to manage the planning, development and evaluation of local issues. The regional medical director is to work in conjunction with local medical directors to provide direction on the delegation of controlled acts, as well as patient-care issues, quality assurance (QA) and paramedics' continuing education. Municipal EMS providers are represented on these committees.¹⁰⁵

¹⁰¹ Personal communication from Lecanne Colvin, Co-ordinator, Provincial/Municipal Operation Policy, MOHLTC EHSB, November 13, 2013.

¹⁰² OMBI has developed a framework for assessing municipal performance on a total of 850 measures by standardizing metrics and data collecting/reporting protocols. See <http://www.ombi.ca>.

¹⁰³ Memorandum of Understanding between Bruce County Emergency Medical Services and the London Health Sciences Centre Southwest Ontario Regional Base Hospital Program, November 8, 2012, accessed December 4, 2013, <http://www.brucecounty.on.ca/assets/documentmanager/1acedaf78e7e8aa79ed4d1f9872cb726.pdf>.

¹⁰⁴ Ibid.

¹⁰⁵ Ibid.

The OBHG Executive has pointed out that "Paramedics are accountable for proper application of medical directives to the medical director, who is further accountable for proper application of legislation and policy with respect to delegation to the College of Physicians and Surgeons of Ontario. Accountability of physicians is confirmed by the requirement that the Base Hospital shall ensure that Base Hospital physicians will be available to provide 'on-line' medical control on a continuous (24/7) basis."¹⁰⁶ OBHG credits the base hospital reviews and the resulting low incidence of identified patient-care issues as evidence that the delegation system works.

Quality Assurance

In its application for regulation, OPA describes how the diagnostic modalities employed by paramedics are spelled out in standards of practice or practice guidelines that fall under the responsibility of MOHLTC and the base hospital program.¹⁰⁷ MOHLTC issues both the BLS Patient Care Standards and the ALS Patient Care Standards; these standards are broadly summarized in Table 5.

Table 5. Specifications: Basic Life Support Patient Care Standards and Advanced Life Support Patient Care Standards

BLS Patient Care Standards	ALS Patient Care Standards
Sets out MOHLTC's expectations regarding paramedic-patient interactions for the period of time in which the patient is being cared for within the pre-hospital care system.	Describes the standards of practice and care by paramedics in Ontario, consistent with the scope of practice of the three levels of paramedics.
Does not include controlled acts. Includes some medical acts such as the splinting of fractures, external hemorrhage control and emergency childbirth.	Includes controlled acts.

All paramedics in Ontario are required to provide patient care in accordance with the standards and procedures set out in the BLS standards; ACPs and CCPs are further required to meet the ALS standards.¹⁰⁸ Municipal EMS providers are obligated to ensure that patient care is provided according to the ALS and BLS standards.¹⁰⁹

Base hospitals have been tasked with monitoring "the quality of the care provided by ambulance services."¹¹⁰ Using tools such as clinical audits, the review of paramedic self-reports and continuing education opportunities, the base hospitals address the performance of paramedics at an individual level as well as the performance of the paramedic care delivery system.

¹⁰⁶ Ibid.

¹⁰⁷ OPA application, 5.

¹⁰⁸ O Reg 257/00, ss. 11 a-b.

¹⁰⁹ Ibid.

¹¹⁰ *Ambulance Act*, s. 4 (2)(d).

The base hospitals' clinical audit/monitoring efforts of ALS standards are another example of the intertwining roles and responsibilities of all involved parties: EHSB requires paramedics to record patient-care activities for every call on an Ambulance Call Report (ACR).¹¹¹ The municipal EMS provider makes ACR and clinical data available to the base hospitals.¹¹² To fulfill its performance agreement with EHSB, the base hospitals review the ACRs for compliance with medical directives.¹¹³ For high-risk acts, audits occur 100% (or almost 100%) of the time; for lower-risk activities, audits are based on the sample size.¹¹⁴

Newly certified paramedics undergo 80% chart audits for the first six months; all paramedics undergo a minimum of five ALS call audits per year.¹¹⁵ When a patient care concern is identified, the base hospital provides the municipal EMS provider as well as the paramedic with feedback regarding the nature and type of concern.¹¹⁶ MOHLTC reviews paramedics' and base hospitals' compliance with controlled act protocols every year, as well as their education and delivery policies and procedures for controlled acts, to ensure consistency with BLS and ALS standards.¹¹⁷

According to OBHG, there is a strong "trust relationship" between paramedics and delegating physicians that is foundational to the delivery of paramedic care; this trust is rooted in the mutual reliance on delegation and the performance of controlled acts ("paramedics demonstrate trust by carefully following medical directives or patching for further direction when a medical directive does not apply. Base Hospital physicians demonstrate trust by writing medical directives that authorize a wide range of interventions that do not require direct communication from a paramedic.")¹¹⁸

OBHG links the trust relationship between delegating physicians and paramedics to another QA process — paramedic self-reporting¹¹⁹ — whereby paramedics come forward to the receiving physician when they think they have not met the standard of care described in the ALS and BLS standards (errors can include variances from medical directives, improper documentation, problems with patching, etc.). Self-reporting is considered to be a professional obligation and is a non-punitive opportunity for paramedics to further their education and improve their practice.¹²⁰ For the base hospitals, self-reports permit a deeper understanding of the root causes

¹¹¹ MOHLTC, *Ambulance Service Documentation Standards*, April 2000, Part IV – Patient & Patient Care Documentation Requirements, accessed December 4, 2013, http://www.ambulance-transition.com/pdf_documents/standards_amb_service_documentation.pdf.

¹¹² Memorandum of Understanding between Bruce County Emergency Medical Services and the London Health Sciences Centre Southwest Ontario Regional Base Hospital Program, November 8, 2012, Section 4. (f) Delegation Under ALS Patient Care Standards, accessed December 4, 2013, <http://www.brucecountv.on.ca/assets/documentmanager/1acedaf78c7e8aa79ed4d1f9872cb726.pdf>.

¹¹³ MOHLTC, *Regional Base Hospital Performance Agreement*, 2008.

¹¹⁴ OBHG presentation to HPRAC, June 13, 2013.

¹¹⁵ *Ibid.*

¹¹⁶ Letter from OBHG to HPRAC, June 12, 2013.

¹¹⁷ MOHLTC, *Regional Base Hospital Performance Agreement*, 2008.

¹¹⁸ *Ibid.*

¹¹⁹ *Ibid.*

¹²⁰ See, for example, Health Sciences North Centre for Prehospital Care, "Self Reporting memo," April 2013, accessed December 4, 2013, https://www.hnsudbury.ca/portalen/Portals/23/Self%20Reporting_2013.pdf.

of error and, in the vein of continuous improvement, allow the hospital to fine-tune and strengthen the system. The positive and "safe" environment has been designed to encourage the reporting of errors, and the program functions in a patient safety-protecting capacity.

Where evidence exists that patient safety is at risk because of a gap in the skill and knowledge of a paramedic in performing controlled acts, medical directors often require educational remediation, either at the individual paramedic level or at the system level.¹²¹ Depending on the circumstance, the base hospitals may also investigate the paramedic and deactivate¹²² or decertify¹²³ him or her. The ALS standards indicate that:

If at any time in the judgment of the Base Hospital Medical Director, conditions have not been maintained, the Base Hospital Medical Director may deactivate/decertify the Paramedic. The employer of the paramedic will be given written notice by the Base Hospital. The Paramedic will be notified verbally immediately by the employer followed by written notice from the Base Hospital. The Paramedic will not be authorized to perform Controlled Acts while they are deactivated/ decertified. The conditions for reactivation/recertification will be determined by the Base Hospital. The conditions will be communicated in writing to the Paramedic. Should a Paramedic fail to successfully complete the prescribed reactivation process, the Medical Director may prescribe further remediation or decertify the Paramedic from the Program.¹²⁴

Complaints

OPA notes in its application for regulation that, "arguably, 'licensed' paramedics are held equally accountable for all aspects of their practice, whether clinical, operational or conduct. Each of these is subject to some sort of complaint and investigations procedure, whether by MOHLTC EHSB, EMS or the Base Hospital Programs."¹²⁵

HPRAC was not able to obtain a complete dataset of complaints for pre-hospital emergency care in Ontario. HPRAC has learned that there is not just one authority for complaints: each complaint is managed by one or more of the oversight partners according to the nature of the complaint and the role of the partner. Complaints received by each of the 53 municipal EMS providers, for example, are not collated.

¹²¹ Letter from OBHG to HPRAC, July 7, 2013.

¹²² According to the ALS standards, 6-3, "Deactivation is the temporary suspension of selected certified paramedic privileges to perform controlled acts by the Base Hospital medical director for the purpose of performing remediation." See http://www.health.gov.on.ca/english/public/program/chs/edu/pdf/als_standards.pdf, accessed December 4, 2013.

¹²³ According to the ALS standards, 6-3, "Decertification is the revocation of a certified paramedic's privileges to perform controlled acts." See http://www.health.gov.on.ca/english/public/program/chs/edu/pdf/als_standards.pdf, accessed December 4, 2013.

¹²⁴ ALS standards, 6-1, http://www.health.gov.on.ca/english/public/program/chs/edu/pdf/als_standards.pdf, accessed December 4, 2013.

¹²⁵ OPA application, 19.

A complaints and investigations procedure has not been made publicly available. However, HPRAC has learned that the three oversight partners, in keeping with their different roles and objectives, have independently developed different complaints tools.

Although each partner has legislative responsibilities related to investigations, there is potential for overlap in the complaints process,¹²⁶ and partners have addressed this potential in various ways. The MOU between the Corporation of the County of Grey Bruce and its base hospital, the London Health Sciences Centre, for example, includes the following statement on investigations: "The collaborative relationship is meant to avoid duplication of effort and facilitate communication, and generate a more timely and accurate investigative process and never to interfere with each agencies [sic] investigative efforts."¹²⁷

In its application for regulation, OPA recounts MOHLTC's description of the outcomes of investigations as including "Paramedic Remedial, Ambulance Act Charges, Service review of paramedic qualifications, Paramedic rewrite, Dismissal, Suspension w/o pay, Criminal Code Charges and Discipline."¹²⁸ The Minister of Health and Long-Term Care has the legislated duty and power to investigate complaints respecting ambulance services.¹²⁹ Any complaints made directly to MOHLTC are forwarded to EHSB Investigation Services for action.

According to the legislation, the guiding oversight principles for municipal EMS providers include ensuring that paramedic care is consistent with BLS standards and, for advanced care and critical care paramedics, ALS standards.¹³⁰ Municipal EMS providers and paramedics are also required to complete incident reports in accordance with the Ontario Ambulance Documentation Standards.¹³¹ These standards describe several scenarios that necessitate incident reports, including "unusual occurrences" such as delays in accessing a patient, pronouncing a patient dead and any instances that result in harm to the patient. According to the Documentation Standards, incident reports that are completed in relation to "unusual occurrences" must be sent to an EHSB Field Office,¹³² which reviews the incident report to see if there has been a possible contravention of the *Ambulance Act*. If there has been a contravention, the report is forwarded to EHSB Investigation Services for action.¹³³

EHSB Investigation Services is also engaged when a municipal EMS provider undertakes an investigation and the complainant is not satisfied with the results of that investigation. Municipal EMS providers have the option of notifying either an EHSB field office or EHSB Investigation

¹²⁶ See, for example, pp. 5-6 of the Corporation of the County of Bruce, "Memorandum of Understanding between Bruce County Emergency Medical Services and the London Health Sciences Centre Southwest Ontario Regional Base Hospital Program," November 8, 2012, which recommends that base hospitals and municipal EMS providers work together on investigations because "[t]here will often be overlap in these situations."
<http://www.brucecounty.on.ca/assets/documentmanager/1aeedaf78e7e8aa79ed4d1f9872cb726.pdf>, accessed December 4, 2013.

¹²⁷ Ibid.

¹²⁸ OPA application, 13.

¹²⁹ *Ambulance Act* 1990, s. 4 (1)(c).

¹³⁰ O Reg 257/00, Part V.

¹³¹ O Reg 257/00, s. 11.1.

¹³² MOHLTC, *Ambulance Service Documentation Standards*, April 2000, Part III.

¹³³ Communication from Mark Hull to HPRAC Secretariat, June 24, 2013.

Services when dealing with a contentious issue; MOHLTC either takes leadership of the investigation or a joint investigation ensues. Municipal EMS providers are also required to fill out an incident report when they receive a complaint relating to their service and when they carry out an investigation relating to an operator's service; there is no obligation on the EMS provider to send these incident reports to MOHLTC.¹³⁴

The specifics related to complaints are also referenced in agreements between MOHLTC and the base hospitals, and between the base hospitals and municipal EMS providers. The County of Bruce's agreement with its base hospital, for example, indicates that all operational complaints received by the base hospital that are related to the municipal EMS provider are to be forwarded to the provider for action.¹³⁵ Similarly, complaints related to the delivery of controlled acts received by the municipal EMS provider are to be forwarded to the base hospital for action.¹³⁶

The agreement also opens the door to joint investigations between the municipal EMS provider and the base hospital, with the EMS provider taking the lead "unless the joint investigation involves an ALS patient care deficiency or concern, or issues relating to the trust relationship between the... medical director and the paramedic."¹³⁷ Through agreements with EHSB, base hospitals are obligated to conduct (or participate in) investigations related to their services when requested to by EHSB.¹³⁸

As noted in "Quality Assurance," above, base hospitals also conduct a QA program of ambulance calls that sometimes results in paramedic remedial education, deactivation, decertification, etc. The base hospital system is not a well known entity, however, and as a result, few complaints are made directly to the base hospital.¹³⁹

In its application for regulation, OPA references an observation in the Auditor General of Ontario's 2005 *Annual Report*, which suggests that the number of complaints received by EMS may be much larger than that received by EHSB.¹⁴⁰ In the report, the Auditor General recommended that MOHLTC and the municipal EMS providers work together to enable MOHLTC to receive the information it needs on the more serious complaints received; consequently, a mutually acceptable investigations protocol was developed and implemented.¹⁴¹ More recently, the investigations protocol was replaced in recognition of MOHLTC's role as regulator, to facilitate its enforcement of the *Ambulance Act*.¹⁴² The revised process gives decision-making authority to MOHLTC when it reviews the complaints that come before it, and

¹³⁴ MOHLTC, *Ambulance Service Documentation Standards*, April 2000, Part III.

¹³⁵ Corporation of the County of Bruce.

¹³⁶ *Ibid.*

¹³⁷ Memorandum of Understanding between Bruce County Emergency Medical Services and the London Health Sciences Centre Southwest Ontario Regional Base Hospital Program, November 8, 2012, Accessed December 4, 2013, <http://www.brucecounty.on.ca/assets/documentmanager/1acedaf78c7e8aa79ed4d1f9872cb726.pdf>.

¹³⁸ MOHLTC, *Regional Base Hospital Performance Agreement*, 2008, 3.0: Host Hospital Requirements, 6.

¹³⁹ Personal communication from Rob Burgess, Acting Chair, OBHG Executive, to HPRAC, September 20, 2013.

¹⁴⁰ OPA application, 13.

¹⁴¹ Office of the Auditor General of Ontario, 2005 *Annual Report*, 58, accessed December 4, 2013,

http://www.auditor.on.ca/en/reports_cn/en05/302en05.pdf.

¹⁴² Personal communication from Mark Hull, Senior Manager, EHSB, to HPRAC Secretariat November 8, 2013.

MOHLTC then decides whether it will conduct an investigation, and whether the investigation is carried out on its own or in conjunction with a municipal EMS provider.¹⁴³

Additional CPSO Enquiry

Because many of the duties that paramedics perform are delegated by a base hospital physician, and in order to better understand the risk of harm, HPRAC requested information from CPSO on complaints involving physicians and the delegation of controlled acts to paramedics. CPSO reported that, from 2006 to 2010, no investigations were conducted relating to delegation to paramedics.¹⁴⁴ However, and although no investigation resulted from the concern, the CPSO is aware of a concern involving a staff member of a NET company that provides first aid at special events (see “Non-Ambulance Care” for more information on this industry).¹⁴⁵ From 2010–13, CPSO’s Inquiries, Reports and Complaints Committee considered 28 cases that involved CPSO’s Delegation Policy; none of these cases was specific to paramedics.¹⁴⁶

HPRAC’s Assessment: Current Protective Measures

HPRAC conducted additional research to assess the OPA rationale for regulation — that the current regime is misaligned and not fully protective of the public and, consequently, that a transformation of the regulatory system is needed in order to streamline the current “complicated” system, include individuals working in the NET industry and others working in the health care field who are not employed by EMS operators, and to create efficiencies in the health care system.¹⁴⁷

In its application for regulation, OPA identified a lack of public accountability in the current model of delegation, which “relies on criteria specified only in the performance agreements between the MOHLTC and Base Hospital Programs on the one hand, and between EMS and Base Hospital Programs on the other, neither of which are publicly available, meaning that the criteria for regulation are not transparent.”¹⁴⁸ HPRAC has discussed elements of these agreements within this report. Similarly, OPA’s findings on the opacity of the system were supported by consultation comments. For example, PAC noted that “There is little public awareness even of the existence of the Base Hospital Programs, let alone the role they play in regulating paramedics in this province.”¹⁴⁹ PAC also noted the lack of public access to discipline

¹⁴³ Ibid.

¹⁴⁴ Letter from CPSO to Tom Corcoran, Chair of HPRAC, November 1, 2013.

¹⁴⁵ Ibid.

¹⁴⁶ Ibid.

¹⁴⁷ OPA application, 3.

¹⁴⁸ OPA application, 21.

¹⁴⁹ PAC submission, accessed December 11, 2013,

<http://hprac.org/en/projects/resources/PartIIConsultationResultsOtherFormat.pdf>.

and other regulatory proceedings, which, according to PAC, is contrary to the public interest.¹⁵⁰ Although the evidence did not show that the delegation process and other elements of the oversight system contribute in a significant way to increasing the risk of harm to patients, HPRAC concurs that an increase in transparency would strengthen the system by ensuring consistency, promoting procedural fairness for paramedics and improving the public's knowledge and understanding of the base hospital program.

Despite the complexity, the current oversight system encourages the base hospitals, EHSB and the municipal EMS operators to cooperate, collaborate and communicate so that each partner can fully meet its obligations. These linkages also result in strengthened paramedic oversight. However, and apart from the obligations to report on the financial aspects of delivering ambulance services, HPRAC is not aware of any performance agreements in place between the municipal EMS providers and EHSB on other metrics. Encouraging a direct alignment between MOHLTC and the municipal EMS providers would also support the oversight system.

Oversight of the BLS standards is generally the responsibility of the municipal EMS provider.¹⁵¹ Because some components of the BLS standards touch upon the delivery of medical care (although not the performance of controlled acts), a potential gap in oversight exists — although the evidence does not show that the potential gap contributes substantively to risk of harm for patients. The OBHG Executive has suggested that public protection would be enhanced if the base hospitals' mandate was expanded to include monitoring of all care provided by paramedics.¹⁵² Options could include reformulating ALS and BLS standards to ensure that employee-related oversight is under the purview of the municipalities, and that all medical/treatment-related items are under the purview of the base hospitals.

OPA has developed a code of ethics for the profession.¹⁵³ The development of a code by which all paramedics in the province abide would benefit both paramedics, in terms of furthering the profession, and the public, by improving the accountability of paramedics. The profession appears to be well prepared for this sort of structural advancement.

As with other aspects of the paramedic care-delivery system, the complaints process is a coordinated, multi-partner, multi-level exercise. Notwithstanding the opacity and complexity of the complaints system as initially described by OPA, supported by some consultation stakeholders and confirmed by research, HPRAC did not uncover evidence that indicated that the current complaints system presents a risk of harm for patients.

The oversight partners currently appear to be very diligent in following up on complaints. However, for best practices, to ensure procedural fairness for paramedics across the province as well as complainants and to continue to support the findings of the Auditor General of Ontario,¹⁵⁴ HPRAC believes that it would be desirable to revise and standardize, to some degree, the complaints processes. As a first step, the development of a centralized library of complaints,

¹⁵⁰ Ibid.

¹⁵¹ Letter from OBHG to HPRAC, June 12, 2013.

¹⁵² Ibid.

¹⁵³ OPA application, 64.

¹⁵⁴ Office of the Auditor General of Ontario, *2005 Annual Report*, 58.

through the appointment and function of a single manager of complaints, would provide certainty and enable the mining of data. As the primary authority, MOHLTC would build on its current complaint-review process and extend it to the review of all complaints received within the pre-hospital emergency care system; complaints would be distributed to the appropriate oversight partner for action according to a decision tree or other standardized tool. In addition, because paramedic services are organized by municipality, and because each municipal EMS provider develops an independent process for handling complaints,¹⁵⁵ it would also be beneficial to standardize the processes followed by municipalities. Investigations should follow the same steps and result in predictable outcomes, no matter where in the province they occur. The intention behind the OMBI initiative supports an increased alignment across municipalities. The most useful processes, and the best-quality data, result from systems that require participation across all municipalities.

There are also opportunities to improve the complaints system by reducing gaps in reporting. For example, although municipal EMS providers provide the incident reports to MOHLTC when those reports are about “unusual occurrences,” and although at least some municipalities notify MOHLTC of each complaint received,¹⁵⁶ the municipal EMS providers are not *obligated* to provide MOHLTC with incident reports related to complaints on their service or when the provider carries out an investigation relating to an operator’s service.¹⁵⁷ Extending the obligation for municipal EMS providers to send *all* incident reports to MOHLTC would add needed consistency and certainty and, ultimately, provide MOHLTC with both an attractive depth of understanding on the “health” of the system and detailed information on negative events and how each municipal EMS provider is performing.

Base hospitals should continue their standardization exercises to ensure that processes related to complaints are followed up in the same manner across the province. For non-complaint matters, base hospitals should continue to strive for consistency across the province. The pre-hospital program at Health Sciences North, for example, offers a CME curriculum that includes both the mandatory educational components needed to maintain certification as well as core and elective education activities.¹⁵⁸ The application for regulation notes that the curriculum in general is geared towards continuing competency, rather than professional development.¹⁵⁹ A greater degree of consistency for CME across base hospitals may be beneficial in ensuring improved professional development activities for all paramedics. As the OMA identified in its consultation submission, certification consistency across base hospitals would enable licence portability for

¹⁵⁵ Email from OAPC to HPRAC, October 10, 2013.

¹⁵⁶ Personal communication between Larry MacKay, Toronto EMS, Acting Commander, Professional Standards, and HPRAC Secretariat, September 19, 2013.

¹⁵⁷ MOHLTC, *Ambulance Service Documentation Standards*, April 2000, Part III.

¹⁵⁸ Health Sciences North Centre for Prehospital Care, Continuing Medical Education memo, June 10, 2009 (revised June 2013), accessed December 4, 2013,

https://www.hsnsudbury.ca/portalen/Portals/23/Self%20Reporting_2013.pdf.

¹⁵⁹ OPA application, 33.

paramedics.¹⁶⁰ In addition, and wherever possible, it would be preferable if oversight processes were referenced in law.

In its application for self-regulation, OPA also described the oversight regime for paramedics delivering care through the ambulance system as being “highly regulated.”¹⁶¹ HPRAC confirmed through research that the potential for risk of harm that is inherent in the delivery of paramedic services has been implicitly recognized and addressed by the current oversight regime, and that the multi-layered and nuanced approach is similar — in structure if not in depth — to some of the public-protection programs administered by the self-regulatory colleges. As stated earlier, one of the objectives of self-regulation is the promotion of informed consumer choice. However, due to the nature and setting of the delivery of paramedic services, with patients requiring emergency care and paramedics being dispatched to emergency calls, consumer choice is not a factor for patients, as it usually is in the delivery of health care in this province.

Initiation of Controlled Acts

In its application for regulation, OPA proposed that “controlled acts no longer be performed under delegation from medical directors of Base Hospital Programs. Under a College of Paramedics, practitioners would be authorized to perform the seven controlled acts within their scope of practice that they currently perform...the performance of controlled acts should no longer require authorization by the medical director of a Base Hospital.”¹⁶²

In further correspondence, OPA provided additional details on how its proposal would be implemented: paramedics would perform controlled acts that correspond to the scope of practice of each paramedic level, as determined by a transitional council and as specified in regulation, and in accordance with a clearly defined set of protocols.¹⁶³ OPA emphasized that other health professions, such as emergency medical physicians, could contribute to the development of paramedics’ scopes of practice; however, “this would no longer be in terms of the delegation of controlled acts.”¹⁶⁴ As an example, OPA referenced the regulation of registered nurses (RNs) and registered practical nurses (RPNs) vis-à-vis access to the controlled acts authorized to those professions.

RNs and RPNs are authorized to perform three controlled acts.¹⁶⁵ An RN or RPN may only perform a procedure within these three controlled acts if he or she is permitted to do so by the regulations made under the Act and the procedure is performed in accordance with the regulations, or if the procedure is ordered by a physician, dentist, chiropodist, midwife or nurse

¹⁶⁰ OMA submission, accessed November 18, 2013,

<http://www.hprac.org/en/projects/resources/PartIIConsultationResultsOtherFormat.pdf>.

¹⁶¹ *Ibid.*, 19.

¹⁶² OPA application, 33.

¹⁶³ OPA letter to HPRAC, August 20, 2013.

¹⁶⁴ *Ibid.*

¹⁶⁵ *Nursing Act, 1991*, S.O. 1991, c. 32, s. 4. On January 1, 2014, RNs and RPNs will be authorized to perform four controlled acts in accordance with the requirements under the *Nursing Act, 1991*.

practitioner (NP).¹⁶⁶ The regulations permit nurses who meet certain conditions to independently decide that a certain procedure (as specified in practice guidelines) is required, and to initiate that procedure without an order or medical directive from a physician.¹⁶⁷

The College of Nurses of Ontario (CNO) has provided guidance to its members to enable a full understanding of roles and responsibilities related to performing controlled acts without authorization.¹⁶⁸ CNO advises, for example, that "initiation" involves assessing the client and identifying a problem; determining the available options; considering the benefits and risks of each option; deciding on a course of action; and "accepting sole accountability... and ensuring that any potential consequences are managed appropriately."¹⁶⁹ CNO also provides clarity on the conditions that need to be met by nurses to enable the safe initiation of procedures, such as having the knowledge, skill and judgment to perform the procedure safely, effectively and ethically.¹⁷⁰

CNO lists the procedures that may be initiated by RNs (procedures that may be initiated by RPNs are listed separately and are more limited than those permitted to RNs) as the following:

1. Care of a wound by cleansing, soaking, irrigating, probing, debriding, packing or dressing;
2. Establishing IV access in anticipation of treatment being prescribed imminently, when a delay in establishing IV access is likely to be harmful to the client (the authorized procedure is establishing the access, not using the solution as a form of treatment, or determining the solution and rate of solution);
3. To assist a client with health management activities, putting an instrument beyond the narrowing point in a client's nasal passages, beyond the larynx or beyond the opening of the urethra; and
4. To assess a client or assist with health management activities; putting an instrument or finger beyond the client's anal verge or into an artificial opening into the body; or putting an instrument, hand or finger beyond the client's labia majora.

CNO notes that the initiation of procedures that involve putting an instrument or finger into a natural or artificial body opening is only permitted when assessing/assisting a client. An RN cannot initiate the same procedures for the purposes of treating a health problem. In addition, authorized procedures cannot require the use of a prescribed drug, since RNs are not authorized to prescribe drugs.

In its practice guideline, CNO advises that "the knowledge, skill and judgment required to initiate a procedure is greater and different from that required to perform the same procedure.

¹⁶⁶ *Ibid.*, s. 5(1) b.

¹⁶⁷ CNO, *RHPA: Scope of Practice, Controlled Acts Model, 2011, Legislation and Regulation Practice Guideline*, accessed December 4, 2013, http://www.cno.org/Global/docs/policy/41052_RHPAscope.pdf.

¹⁶⁸ *Ibid.*

¹⁶⁹ *Ibid.*, 4-5.

¹⁷⁰ *Ibid.*, 5.

Nurses who consider initiating procedures are advised to clarify their scope of role responsibility within the health care team and with their employers.”¹⁷¹

The base hospitals’ MAC has also cautioned that paramedics providing care without patching cannot be considered equivalent to independent practice, “since base hospitals perform rigorous quality assurance chart reviews on calls with controlled medical acts. The low frequency of patching to a base hospital physician and relatively low variances from the established medical directives by land paramedics should not be considered as a surrogate for an ability of paramedics to practice independently of physician oversight.”¹⁷²

During consultation, several stakeholders expressed a lack of support for OPA’s suggestion that paramedics be permitted to initiate controlled acts within a self-regulatory scheme. OBHG, for example, observed that the performance of controlled acts without delegation requires critical appraisal and a depth of knowledge that is beyond the two-year community college paramedic entry-to-practice program. It also noted that no other profession in Ontario performs such a broad scope of duties without more initial education and/or delegation. HPRAC’s literature review described the complexity of providing care in the pre-hospital setting and noted that there are unknowns around how the “scene management” aspects of paramedic practice in Ontario might affect a paramedic’s ability to safely initiate procedures.

HPRAC’s Assessment: Initiation of Controlled Acts

The CNO practice guideline provides cautionary advice to nurses on the initiation of controlled acts, and establishes a limited number of procedures within those controlled acts that may be initiated by a nurse. It is not known how paramedics’ current network of medical directives and supports would translate into practice guidelines such as those provided to Ontario’s nurses, and whether the realities of paramedic practice, especially at the advanced care and critical care level, lend themselves to an approach that is similar to CNO’s. Key stakeholders have differentiated between the skill needed to perform a medical procedure and the skill needed to initiate a medical procedure. The application for regulation and subsequent correspondence did not clearly indicate how the public interest would be served by the initiation of controlled acts by paramedics.

Non-Ambulance Care

Among other things, the applicant also sets out, as fundamental to its case for self-regulation, the need to include “paramedics working outside of an EMS.”¹⁷³ In its application for regulation, OPA has described “licensed paramedics” as paramedics working for a municipal EMS provider

¹⁷¹ Ibid, 5

¹⁷² Email from Rob Burgess, Acting Chair, OBHG Executive, to HPRAC Secretariat, July 8, 2013.

¹⁷³ OPA application, 3.

and authorized by the medical director of a base hospital program to perform controlled acts; "unlicensed paramedics" were described as paramedics not working for a municipal EMS provider and not authorized to perform controlled acts.¹⁷⁴ OPA further classified the unlicensed paramedics as employees of non-ambulance/paramedic companies involved in non-emergency patient transfer,¹⁷⁵ event medical¹⁷⁶ and industry.¹⁷⁷

Medical transportation companies are private entities that transfer hundreds of thousands of non-critical patients between Ontario hospitals and other locations every year. Some of their vehicles are equipped to handle stretchers and, as a result, the vehicles bear a resemblance to ambulances. The uniforms worn by NET staff may also give the impression that staff are working for a traditional ambulance service. Company logos or branding may contribute to that impression as well. There are, however, significant differences between the ambulance service provided by the municipalities and the transportation service provided by the NET industry.

The NET industry is defined in a piece of legislation for which the Ministry of Transportation (MTO), not MOHLTC, is responsible. The *Highway Traffic Act* (HTA) differentiates the NET industry from municipally provided ambulances. In the Act, "medical transportation service" is defined as a service that is designated by the Minister of Transportation and that offers transportation to the public, primarily for medical purposes, within, to or from a municipality, but does not include an ambulance service that is licensed under the *Ambulance Act*.¹⁷⁸ NET vehicles transport only medically stable passengers, including those in ambulance-style vehicles. (Under some circumstances, medically stable passengers require a stretcher because they are not able to travel in a seated position in a non-ambulance style vehicle.)

In general, the NET industry and ambulances target distinct and different patient populations. The *Ambulance Act*, which is overseen by the Minister of Health and Long-Term Care, defines "ambulance" as a transportation vehicle for acutely ill people or people who are medically unstable and require the care of a physician, nurse, other health care provider or paramedic, and the use of a stretcher while being transported.¹⁷⁹

Paramedics in Ontario are authorized to perform controlled acts in emergency situations; NET staff manage medically stable individuals and are not authorized to perform controlled acts.

Because the patient/client population is different, the NET industry's ambulance-style vehicles and other vehicles are not stocked with ambulance-level equipment. Although some NET staff may have paramedic education, based on the NET industry's focus and its patient population, the

¹⁷⁴ OPA application, 46.

¹⁷⁵ "These are companies, most of which are operated by paramedics, that employ a mix of personnel including paramedics and lay people with first aid training. Some of these transfers are done with nurse escort from one hospital to another and others are done without an escort." OPA letter to HPRAC, June 14, 2013, 3.

¹⁷⁶ "These are companies that provide First Aid Primary Care Paramedic or Advanced Care Paramedic levels of care at events such as concerts, sporting events, movie sets, etc." OPA letter to HPRAC, June 14, 2013, 3.

¹⁷⁷ "These are generally large companies where employees have a higher risk of injury. These might include the auto manufacturers, oil and gas industries, mining, etc. Unfortunately the company HR departments we contacted were either reluctant to discuss the number of paramedic employees or the level of care they were providing or did not call us back." OPA letter to HPRAC, June 14, 2013, 3.

¹⁷⁸ *Highway Traffic Act*, R.S.O. 1990, c. H.8, s. 191.5.

¹⁷⁹ *Ambulance Act*, s. 1(1).

staff in NET vehicles are generally not *required* to have paramedic qualifications. In the South West Local LHIN,¹⁸⁰ for example, the most highly credentialed NET staff are required to comply with first responder training requirements.¹⁸¹

The South West LHIN is in the process of standardizing the procurement of non-emergency transport across the LHIN in order to realize economies of scale and enforce consistent standards, both in the awarding and the management and oversight of contracts.¹⁸² In recent years, municipal EMS services across the province have refocused on the core mandate of responding to emergency calls, a shift that has affected their ability to provide non-emergency transfer services. The South West LHIN project addressed this reality.¹⁸³ A five-year service agreement between the LHIN and Voyageur Patient Transfer Services Inc. (the NET provider) came into effect on June 1, 2013.¹⁸⁴ Included in the project are standardized decision guides for use by hospital staff when choosing patient transportation. The decision guides ensure that the most appropriate form of transport is consistently requested for patients. For non-emergency transports, staff determine that the patient is not critically ill and is at low risk of change. If a patient is acutely ill or medically unstable, hospital staff requisition a traditional EMS ambulance.

According to the agreement,¹⁸⁵ NET staff-training requirements vary for each type of vehicle (i.e., stretcher vehicle, wheelchair vehicle and taxi); stretcher vehicles' staff require the most advanced credentials (i.e., first responder training). As well, according to the agreement, Voyageur will provide its employees with the education and training they need to provide the service. The first responder training offered by the company teaches advanced first aid techniques (e.g., how to sustain life and prevent further injuries, and the consequences of further injury until more advanced medical personnel arrive). It is a one-week course and participants must already possess a cardiopulmonary resuscitation (CPR) certificate. Staff must also be trained in the safe use of oxygen; assist with toileting (e.g., emptying a catheter bag); and have a minimum grade 12 education. As well, stretcher and wheelchair staff must undergo an annual vulnerable person/criminal background check.

¹⁸⁰ One of 14 not-for-profit organizations across the province. The LHINS are responsible for planning, integrating and funding local health services. They manage the health services that are delivered in hospitals, long-term care facilities, community health centres, community support services and mental health agencies.

¹⁸¹ Healthcare Materials Management Services, *Service Agreement, Voyageur Patient Transfer Services Inc.*, Schedule 4: Mandatory Quality and Safety Standards, 2013.

¹⁸² South West LHIN, *Non-Urgent Patient Transportation Project - South West LHIN, Project Charter*, March 30, 2011, accessed December 4, 2013,

http://www.southwestlhin.on.ca/uploadedFiles/Public_Community/Committees/Patient_Access_and_Flow/20110330%20-%20Project%20Charter%20-%20summary%20for%20general%20use.pdf.

¹⁸³ Non-Emergency Transport (NET), "What You Need to Know!" cPresentation, 3, accessed December 4, 2013, http://www.southwestlhin.on.ca/uploadedFiles/Public_Community/Committees/Patient_Access_and_Flow/NET%20in%20PDF%202013%2007.pdf.

¹⁸⁴ Healthcare Materials Management Services, Schedule 4: Mandatory Quality and Safety Standards, 2013.

¹⁸⁵ Ibid.

Ontario's Ombudsman has investigated the NET industry and the public protection-related role of MTO and MOHLTC.¹⁸⁶ According to the Ombudsman's *2011–2012 Annual Report*, two coroners' inquests and a report by the Auditor-General (dating back to 1995) have called for standards to be put in place.¹⁸⁷ In response to the Ombudsman's report, the Ontario government announced that it "agrees with the Ombudsman that the industry requires effective and comprehensive regulation, as soon as possible. At the earliest opportunity, the government plans to introduce legislation that would, if passed, regulate the industry by setting core standards and requirements on transporting passengers between health care facilities in non-emergency situations."¹⁸⁸

Community Paramedicine

HPRAC's literature review included a reference to the International Roundtable on Community Paramedicine (IRCP), which described a community paramedic as a person who practises within an expanded scope (i.e., who exceeds the original capacity of his or her educational preparation by applying specialized skills or protocols) or within an expanded role (i.e., using existing skills to work in non-traditional roles).

Community paramedicine is provided to members of the community who require assessment, treatment and management for low-acuity medical problems, chronic health issues and health maintenance. Community paramedics are responsible for such things as assessing the patient, deciding on best practice treatment options and communicating with the patient and his or her family members. HPRAC has learned that, among existing community paramedicine projects, a variety of care delivery models are currently in use, some operating within paramedics' current scope of practice and others potentially expanding the scope of practice.

For example, some regions are developing programs and best practices to address the non-emergency primary care needs of seniors and other vulnerable patients and, as a result, paramedics are engaging in non-traditional roles to assist in health care delivery. Paramedics in other regions mitigate shortages of physicians and nurses or other health care professionals, often in rural or remote areas. In urban areas, paramedics sometimes deliver care in home settings. Other urban community paramedics deliver care via a mobile unit, in conjunction with a nurse practitioner or doctor. Community paramedicine projects connecting patients to appropriate supports such as community care access centres (CCACs) are also found in a number of areas in Ontario. Finally, some holistic programs involve more than one type of community paramedicine program.

For example, a recent newspaper article describes the Cardiovascular Health Awareness Program, a pilot project that provides weekly, drop-in paramedic visits to low-income seniors

¹⁸⁶ Ontario Ombudsman, *Annual Report 2012-2013 update*, accessed December 4, 2013, <http://www.ombudsman.on.ca/Investigations/SORT-Investigations/Completed/Non-emergency-medical-transportation-services/Case-update---Annual-Report-2012-2013.aspx>.

¹⁸⁷ *Ibid.*, 40.

¹⁸⁸ MOHLTC, "Ontario Strengthening Patient Safety," archived news release, June 10, 2011, accessed December 4, 2013, <http://news.ontario.ca/mohltc/en/2011/06/ontario-strengthening-patient-safety.html>.

living in a Hamilton, Ontario, housing complex.¹⁸⁹ Paramedics teach the residents about healthy lifestyles, measure blood pressure and assess health risks, send reports to family doctors and make referrals to various community programs. Before the project, residents of the complex made a high volume of calls to ambulance services. Soon after implementation, calls to EMS were reduced by 32%.¹⁹⁰ Seniors at the complex also report an improved quality of life, which, according to the project “leader in the field” (who is also a paramedic), represents a more significant, albeit unquantifiable, outcome. “The statistics don’t quantify getting seniors more comfortable with their medical conditions, which improves their lifestyle.... We’re here for their quality of life, which has seemed to improve quite drastically.”

Although there is a high level of variability in terms of scope and services delivered across community paramedicine projects, common to most of these projects is a leveraging of paramedics’ skills to bridge gaps or create efficiencies in the health care system, and an increasing alignment of those skills with primary health care. In Canada, some literature — as well as program evaluation metrics — indicates the success of certain community paramedicine programs. Further research is required, however, especially with respect to quantifiable cost-benefit analyses.

Community paramedicine represents a very new role for paramedics and, in general, appears to be evolving at a grassroots level to suit the specific needs of communities. The field has been described as the “evolution” of the profession, and successes have been linked to paramedicine’s twin characteristics of health care skills and mobility.¹⁹¹

The EMS Chiefs of Canada (EMSCC) has characterized the development of community paramedicine as a rational effort to maximize efficiency in the health care system. During the consultation process, HPRAC heard from practising paramedics as well as organizations on this topic. Some stakeholders were enthusiastic about the high-return benefits to patients and the health care system that community paramedicine programs, “the future of paramedicine,” provide.¹⁹² Community paramedicine, according to the Paramedic Association of Canada (PAC), is a “logical extension of the combination of paramedics’ health care training and mobility, since they aim to bring health care to the patient rather than the reverse. In doing so, they can reduce the need for emergency medical response.”¹⁹³

The flexibility of community paramedicine aligns well with current government health care policy, which focuses on the patient — Ontarians who are increasingly aged and living with a chronic disease. One of the three priorities of Ontario’s *Action Plan for Health Care* is delivering the right care, at the right time, at the right place.¹⁹⁴ The *Action Plan* also supports “expanding

¹⁸⁹ Joanna Frketic, “Pilot project saves man’s life and cuts ambulance calls; Regular visits from paramedics help seniors manage health issues and identify undetected ones,” *Hamilton Spectator*, A1, October 19, 2013.

¹⁹⁰ *Ibid.*

¹⁹¹ PAC consultation submission, July 5, 2013, accessed December 4, 2013, <http://paramedic.ca/wp-content/uploads/2013/07/PAC-HPRAC-Letter-and-submission.pdf>.

¹⁹² Consultation submission, private citizen (submitter 153).

¹⁹³ PAC consultation submission.

¹⁹⁴ MOHLTC, *Healthy Change, Ontario’s Action Plan for Health Care*, accessed November 18, 2013, http://www.health.gov.on.ca/en/ms/ecfa/healthy_change.

access to house calls from health care professionals” and providing primary care outside of the emergency room. As well, Ontario’s Seniors Care Strategy will “help older Ontarians (age 65 and older) stay healthy, live at home longer and receive the right care, at the right time and in the right place.”¹⁹⁵

There are also areas of concern about the uptake of community paramedicine into the paramedic profession. HPRAC heard from stakeholders that the educational preparation and training of paramedics is out of sync with the skills needed to safely practise community paramedicine, and that there is therefore a need to modernize the education of paramedics, the oversight system and other overarching elements of community paramedicine. CPSO, for example, expressed concern: “The current role of paramedics to provide emergency care within a highly regulated system with significant physician oversight is in stark contrast to independent practice in a community setting.”

The potential for an expanded scope of practice for paramedics was identified as a specific area in which impacts to all of the regulatory supports needed to be carefully considered and, where appropriate, aligned. For example, referral-based community paramedicine programs may be particularly risky for patients, because referring patients to these programs is not currently part of the paramedic culture and mindset, and the referrals are happening outside of the base hospitals’ oversight. “The area of most high risk in these undertakings is the use of a referral process for patients encountered by community personnel... these processes are completely outside the training of paramedics and raise safety concerns.”¹⁹⁶ Similarly, HPRAC’s literature review identified a 2009 US meta-analysis that studied US paramedics’ ability to determine the medical necessity of ambulance transport. It found an under-triage rate of between 9% and 29%; the report concluded that the data do not support the practice of American paramedics determining whether patients require ambulance transport.¹⁹⁷

HPRAC’s Assessment: Non-Ambulance Care

The evidence discussed in “Current Protective Measures” indicates that the work of each paramedic is a component of the emergency pre-hospital care system, and difficulties arise when there is an attempt to consider the actions of paramedics — including risk of harm and public-interest aspects of practice — outside of the system. It is the combination of being trained and given the tools to perform controlled acts, as well as working within the governance and oversight of the pre-hospital care system, that is at the centre of paramedic practice in Ontario.

Although OPA excluded emergency medical responders (EMRs) from its application for self-regulation (“in the OPA’s view, their inclusion within a College of Paramedics would be inappropriate, as the standards of practice of EMRs does not reach the risk of harm threshold that self-regulation under the RHPA requires. In particular, EMRs are not certified to perform

¹⁹⁵ MOHLTC, *Ontario’s Seniors Care Strategy, Public Questionnaire*, accessed November 18, 2013, <http://www.health.gov.on.ca/en/public/programs/ltc/scss.aspx>.

¹⁹⁶ Consultation submission, private citizen (submitter 4).

¹⁹⁷ Brown et al., “Paramedic Determinations of Medical Necessity: A Meta-Analysis,” *Pre-Hospital Emergency Care*, 2009, 13(4), 516-27.

controlled acts.”),¹⁹⁸ based on HPRAC’s research, NET staff appear to work at a practice level that is close to that of an EMR.

The number of graduates from paramedic educational programs in Ontario exceeds the number of new hires at municipal EMS services: from 2008 to 2012, approximately 1,700 graduates were unable to gain employment as a paramedic.¹⁹⁹ It was proposed during consultation that the employment of graduates from paramedicine programs within the NET industry may be a function of an oversaturated job market²⁰⁰ and not the result of a specific need for paramedic-level care.

Additionally, OPA’s definition of “unlicensed paramedic” is not consistent with the definition of “paramedic” in the *Ambulance Act* and, based on the importance of the *Ambulance Act* to the delivery of paramedicine in Ontario, the definition in the Act takes primacy. In the Act, a “paramedic” is a person who has met the entry-to-practice requirements, is employed by an ambulance service and is authorized to perform controlled acts under the authority of a base hospital medical director.²⁰¹ A paramedic is always licensed through MOHLTC and the base hospital program and performs controlled acts on acutely ill or medically unstable patients. Those conditions have not been met by NET staff. Not only are NET staff not routinely working as paramedics as described by the *Ambulance Act*, but their job does not *require* them to work as a paramedic or have paramedic training or education. The NET industry has filled a gap in services for patients who do not need a paramedic, and there is no evidence to show that NET staff need to be paramedics. In the South West LHIN, for example, if an emergency arises during transport, all NET staff are trained to perform within the limits of their first responder education to maintain the patient and to then *call an ambulance (and paramedics)* by dialing 911.²⁰² No compelling evidence was provided to support the notion that NET staff or a person who has studied paramedicine (and possibly obtained certification through EHSB) is a “paramedic,” outside of the emergency pre-hospital care delivery system, as it is presently understood.

It is because of existing legislation that the NET industry operates outside of the legislative and procedural protections of the municipally provided ambulance service (e.g., the structure of the *Ambulance Act*, QA activities of the base hospital program, oversight and support of the municipal EMS providers, etc.). Because of the differences noted above, however, we do not believe that this in itself is a cause for concern, and MOHLTC’s commitment to regulating the non-emergency patient transportation industry does not intersect with HPRAC’s consideration of the application for self-regulation of paramedics. HPRAC has reviewed the standardization exercise of the South West LHIN in terms of the Ontario Ombudsman’s findings. Rolling out the initiative, or a similar program, across the province would support the Ombudsman’s recommendations as well as MOHLTC’s commitment to regulate the industry.

¹⁹⁸ OPA, 3.

¹⁹⁹ OPA letter to HPRAC, June 12, 2013, 2.

²⁰⁰ Consultation submission, PAC, pages 83-84, accessed December 5, 2013, <http://hprac.org/en/projects/resources/PartIIConsultationResultsOtherFormat.pdf>.

²⁰¹ *Ambulance Act*, s. 1(1).

²⁰² Healthcare Materials Management Services, Schedule 4, Clause 8.

Although most NET employment does not involve the performance of controlled acts, HPRAC has learned that some event medical companies and other industrial companies employ staff who may perform controlled acts under delegation from a non-base hospital physician.²⁰³ Because of NET-sector dynamics and a lack of formal organization, it is difficult to determine the number of individuals working within these parameters and the number of patients being cared for. Anecdotally, however, both numbers appear to be low.²⁰⁴ As reported in "Complaints," CPSO is aware of a concern involving a staff member of a non-emergency transportation company that provides first aid at special events. However, there are patient-safety protections built into the system and, as mentioned previously (see "Delegation"), delegation is a standard tool used by physicians in Ontario in the efficient delivery of health care, and delegating physicians are subject to the related guidelines and standards and regulations of CPSO.

Nevertheless, due to the strength of the paramedic care-delivery system, the difficulty in separating out the risk-of-harm components of the care delivered by paramedics from the emergency pre-hospital care delivery system as a whole, and the case reported by CPSO, which involved the staff of a non-ambulance care company that provides first aid at special events, it would be preferable if all paramedic-type services occurred only within the base hospital program and that anyone working in a quasi-paramedic role and performing controlled acts operated within the base hospital program.

Currently, community paramedics do not have the benefit of the oversight network that is available to emergency care paramedics, and these individuals have also not been delegated the authority to perform controlled acts by base hospital physicians. When community paramedics operate outside of the base hospital program, it affects their ability to work to their full scope of practice. Although HPRAC reviewed community paramedicine programs that frequently involve low-acuity, low-risk paramedic activities, it is conceivable that these programs could include a requirement for paramedics to either perform controlled acts or potentially perform controlled acts: it is reasonable to assume that that is why paramedics have been engaged for these projects. As with health care employees working in industry and providing paramedic-type care, community paramedics should also only operate within the oversight structure of the base hospital program.

In addition, the purpose of the community paramedicine programs is, in part, to create efficiencies in the health care system. However, if a community paramedic encounters a client who requires full paramedic care, under the current framework he or she must dial 911 and engage EMS, which would negate the efficiencies that community paramedicine was designed to create. Although this system would technically work, it would add a level of complexity that would be better avoided.

For patient safety and efficiency, and in keeping with successful community paramedicine programs in other jurisdictions, OBHG Executive is prepared to extend the medical oversight and delegation of controlled acts to Ontario's community paramedics.²⁰⁵ OBHG Executive draws

²⁰³ OPA letter to HPRAC, June 12, 2013, 3.

²⁰⁴ See, for example, letter from OBHG to HPRAC, June 12, 2013, 2.

²⁰⁵ Consultation submission, OBHG, accessed December 4, 2013, <http://hprac.org/en/projects/resources/PartIIConsultationResultsOtherFormat.pdf>.

comparisons between the process of assuming responsibility for overseeing the community paramedicine programs and how previous advancements in paramedicine were assumed by the base hospitals, including the introduction of symptom relief and advanced life support.²⁰⁶

Community paramedicine programs are quite new and, to HPRAC's knowledge, the Ontario government has not formalized community paramedicine into a program-level initiative. If the piloted community paramedicine initiatives become full-scale programs, government funding models will need to be adjusted in order to permit the functioning of this program within the base hospital program.

Currently, MOHLTC's priority for pre-hospital emergency care is the delivery of ambulance services. Broadening this view and emphasizing the delivery of paramedic services will require a reimagining of pre-hospital care, including the adoption of a paramedic-centred approach. One way to achieve this is through amendments to the *Ambulance Act* (or another piece of legislation) in order to provide title protection. HPRAC concurs with OPA's recommendation that the titles of "Primary Care Paramedic," "Advanced Care Paramedic" and "Critical Care Paramedic" be restricted to practitioners who meet the respective entry-to-practice requirements, maintain CME requirements and meet other certification requirements. The shifting of perspective, which includes the introduction of title protection and mandatory affiliation with a base hospital, could enhance patient safety.

Interprofessional Care

Interprofessional collaboration (IPC) is central to the efficient delivery of care in Ontario's health care system. Although there are varying definitions of the terms "interprofessional care" and "interprofessional collaboration," HPRAC accepts HealthForceOntario's definition for interprofessional care: "the provision of comprehensive health services to patients by multiple health caregivers who work collaboratively to deliver quality care within and across settings."²⁰⁷

OPA has stated that, "paramedics in Ontario have not had the opportunity to increase interprofessional collaboration as effectively as is desired because...the current regulatory system is overly complex and unwieldy."²⁰⁸ HPRAC has also heard from individual paramedics, who have expressed support for enhancing IPC ("It will simply encourage professionalism and standardize the understandings of our scope of practice with allied health professionals.")²⁰⁹

OPA has identified IPC as a significant issue for paramedics based on the independent nature of paramedic work: not only is IPC essential for good practice based on the high-risk activities

²⁰⁶ Ibid.

²⁰⁷ HealthForceOntario, Interprofessional Care Steering Committee, *Interprofessional Care: A Blueprint for Action in Ontario*, 2007, accessed November 18, 2013, <http://www.healthforceontario.ca/UserFiles/file/PolicyMakersResearchers/ipc-blueprint-july-2007-en.pdf>.

²⁰⁸ OPA application, 43.

²⁰⁹ Consultation submission from a private citizen (submitter 18), accessed December 5, 2013, <http://hprac.org/en/projects/resources/PartIConsultationResultsSurveyFormat.pdf>.

performed without direct supervision, but paramedics also have fewer opportunities for interaction than other health professions.²¹⁰

Evidence from HPRAC's literature review supports this position. As described earlier in "Literature Review," a report on "advancing and aligning the culture of patient safety in EMS" was identified that concluded, among other things, that IPC is an essential building block for improving pre-hospital patient safety.²¹¹ Other reports independently supported this conclusion as well. For example, a 2010 systematic review described the issue of information loss during patient handover; it also noted potential solutions to the issue, such as using structured processes, involving appropriate and experienced personnel, and improving multidisciplinary education.²¹²

This example from the literature was observed by the Auditor General and cited previously in this report (see "The Auditor General of Ontario," in Chapter I). The Office of the Auditor General of Ontario's 2010 *Annual Report* identified opportunities for enhanced patient safety through enhanced IPC (and other improvements) related to the off-loading of patients from ambulances to the emergency room.²¹³ The report noted inconsistencies in the way paramedics and emergency room staff interpret triaging guidelines; this was attributed to outdated training of paramedics.²¹⁴ According to the Auditor's report, paramedics had been "raising the issue with the ministry for some time."²¹⁵

In response to the report, MOHLTC advised that it was working with its oversight partners (i.e., the base hospital program's MAC and the municipal EMS providers) to better align the language used by pre-hospital and in-hospital staff when communicating a patient's medical condition.²¹⁶ MOHLTC also promised to "explore avenues for providing updated training" for paramedics. In addition to exemplifying the possibilities for improved patient care through IPC, and the strength of the collaborative relationship between the oversight partners, this example also illustrates some of the challenges faced by paramedics when trying to participate in IPC events.

These challenges do not appear to be related to paramedics' competency or the perception of paramedics held by other health care providers. During consultation, for example, most participants — regardless of their support for regulation — agreed that the profession "has shown a willingness and a capacity to effectively collaborate with other professions."²¹⁷ HPRAC also received detailed submissions from a number of stakeholders on this issue. Some of these submissions provided wholesale approval ("the Association of Ontario Midwives supports self

²¹⁰ OPA application, 41.

²¹¹ CPSI, 30.

²¹² Bost et al., "Clinical handover of patients arriving by ambulance to the emergency department: A literature review," *International Emergency Nursing*, 2009, 18:210-220.

²¹³ Office of the Auditor General of Ontario, *Annual Report* (2010), c. 3, s. 3.05, 135, accessed December 4, 2013, http://www.auditor.on.ca/en/reports_en/en10/305en10.pdf.

²¹⁴ *Ibid.*

²¹⁵ *Ibid.*

²¹⁶ *Ibid.*, 144.

²¹⁷ One of the statements (of Question 7) in which stakeholders expressed their level of agreement during HPRAC's consultation period.

regulation...as a means to...improve interprofessional relations")²¹⁸; others emphasized the importance of working within the current oversight system to enhance interprofessional care ("the [OMA] believes that the OPA and the medical community, including the base hospital program, should focus on strategies and processes that improve interprofessional care. We are confident that these strategies and processes currently exist within the base hospital framework.")²¹⁹ Still other stakeholders, such as the Ontario Public Service Employees Union (OPSEU), felt that there was no evidence that regulation would improve IPC.²²⁰

In its consultation submission, PAC outlined the importance of empowering paramedics in optimizing patient care ("Only if paramedics are able to contribute to primary health care as full professionals, with responsibility and accountability for their own conduct and competency, will prehospital and community health care be able to reach and maintain standards of the highest quality.")²²¹ PAC also described the growing importance of IPC for community paramedicine and referenced the related recommendation of Dr. Samir Sinha, Expert Lead, Ontario's Seniors Care Strategy ("it is of vital importance that paramedics be able to work collaboratively with *non emergency* healthcare providers such as nurses, nurse practitioners, midwives, occupational and physical therapists, etc., and to be integral members of collaborative teams exploring new and effective ways of managing these challenges.")²²²

HPRAC's Assessment: Interprofessional Care

In its application for regulation, OPA states that "paramedics in Ontario have not had the opportunity to increase interprofessional collaboration as effectively as is desired, because they are not self-regulated...self-regulation within a College of Paramedics would remove...barriers for paramedics, thereby improving and increasing interprofessional collaboration by making it possible for the profession to engage effectively with other regulated health professions to establish best practices in the performance of controlled acts and other clinical treatments."²²³

HPRAC has examined the concept of IPC and its impact on Ontario's health care system and, in 2008 and 2009, delivered two interim reports²²⁴ and a final report²²⁵ on the subject to Ontario's

²¹⁸ Consultation submission, Association of Ontario Midwives, accessed December 5, 2013, <http://hprac.org/en/projects/resources/PartIIConsultationResultsOtherFormat.pdf>.

²¹⁹ Consultation submission, OMA, accessed December 5, 2013, <http://hprac.org/en/projects/resources/PartIIConsultationResultsOtherFormat.pdf>.

²²⁰ Consultation submission, OPSEU, accessed December 5, 2013, <http://hprac.org/en/projects/resources/PartIIConsultationResultsOtherFormat.pdf>.

²²¹ Consultation submission, PAC, accessed December 5, 2013, <http://hprac.org/en/projects/resources/PartIIConsultationResultsOtherFormat.pdf>.

²²² Ibid.

²²³ OPA application, 43.

²²⁴ HPRAC, *An Interim Report to the Minister of Health and Long-Term Care on Mechanisms to Facilitate and Support Interprofessional Collaboration among Health Colleges and Regulated Health Professionals*, March 2008, accessed November 18, 2013, <http://www.hprac.org/en/reports/resources/HPRAC-EnglishInterprofessionalCollaborationInterimReportMarch08.pdf>.

²²⁵ HPRAC, *Critical Links: Transforming and Supporting Patient Care. A Report to the Minister of Health and Long-Term Care on Mechanisms to Facilitate and Support Interprofessional Collaboration and a New Framework*

Minister of Health and Long-Term Care. The policy recommendations were meant to have wider applicability to health care providers, regardless of their regulatory status. Although self-regulation certainly enables IPC, HPRAC is of the view that there are ways and means of addressing and improving IPC for all health professionals.

Evidence from the literature suggests that strengthened IPC is associated with, among other things, positive patient outcomes. Although it is not one of HPRAC's criteria for regulation, support for enhancing paramedics' professionalism, which links implicitly to IPC, was another recurring theme in the consultation comments: HPRAC heard from the OBHG,²²⁶ OHA²²⁷ and others on this matter.

Not only is expanding IPC in the paramedic profession a key way to improve patient safety, it also builds on the respect and goodwill expressed by health care delivery partners. As the paramedic profession matures and its roles evolve, the importance of IPC will be emphasized. The community paramedicine program, in particular, brings not only a new opportunity for paramedics to interact with other health care professionals,²²⁸ but also to assume a leadership role in an emerging field. Based on the structure of the paramedicine oversight regime, improving IPC and providing more opportunities for paramedics to participate in IPC events presents a "win-win" scenario.

The Federation of Health Regulatory Colleges of Ontario (FHRCO) has developed an Interprofessional Collaboration eTool to help coordinate care within teams and "optimize roles, responsibilities, and services for fulfilling patient/client needs."²²⁹ The tool has the potential to address barriers to interprofessional care by accommodating all team members, including regulated and non-regulated health care practitioners and non-healthcare professionals (e.g., social workers, school representatives, etc.). Consistently and comprehensively using this tool or a similar tool, or its guiding principles, within paramedic interprofessional care teams will address some of the barriers to IPC that have been observed by OPA, the Auditor and others.

for the Prescribing and Use of Drugs by Non-Physician Regulated Health Professions, January 2009, http://www.hprac.org/en/reports/resources/hpraccriticallinksenglishjan_09.pdf.

²²⁶ HPRAC, *Stakeholder Feedback on the Regulation of Paramedics and Emergency Medical Attendants (EMAs) under the Regulated Health Professions Act, 1991 (RHIPA)*, Part II, 30, <http://hprac.org/en/projects/resources/PartIIConsultationResultsOtherFormat.pdf>.

²²⁷ *Ibid.*, 34.

²²⁸ OPA application, 42.

²²⁹ FHRCO, Interprofessional Collaboration (IPC) eTool, accessed December 12, 2013, <http://ipc.fhrco.org>.

Chapter V: Rationale and Conclusion

HPRAC's decision-making process²³⁰ is thorough, transparent, flexible and evidence-based. In considering the application to regulate paramedics under the RHPA, HPRAC undertook research to provide the evidence for its conclusions, and drew on organizations and individuals with relevant expertise in Ontario and elsewhere.

While considering OPA's application for regulation, HPRAC also kept in mind the primary goal of regulatory oversight: safe, effective and patient-centred health care. HPRAC was mindful of the need to keep regulatory oversight proportionate to risk and the public-interest aspects of changing a regulatory regime, from indirect regulation through the *Ambulance Act* to self-regulation under the RHPA.

HPRAC's review process does not include an assessment of the merits of the profession seeking regulation. Rather, HPRAC's criteria and process examines whether the applicant meets the risk of harm threshold and whether it is otherwise in the public interest that the profession be regulated under the RHPA.

In undertaking its assessment process, HPRAC learned that paramedics in Ontario have earned the respect of their peers; the evidence provided also indicates that Ontario's paramedics are believed to be highly skilled professionals (e.g., the Registered Nurses' Association of Ontario wrote that "It is without question that Paramedics and EMAs are invaluable emergency responders whose trusted skill is responsible for saving and prolonging life. These brave women and men are to be commended for the tremendous courage and dedication they bring to their role as important members of the emergency response team.").²³¹ The scene-management aspect of paramedic practice necessitates that paramedics have unique, and very specialized, skills. As Campeau noted, the practice setting — and not the treatments paramedics use — differentiate paramedic practice from that of other health care providers.

The evidence also shows that the current oversight system is complex and that, additionally, many integral processes do not occur in the public sphere. However, there is no evidence to show that the system's complexity and opacity significantly increase the risk of harm to patients. For example, HPRAC learned — through consultation comments, key informant interviews and other research — of the strength of the current oversight system and its mitigating effect on residual risk. Among other things, EHSB, the base hospital program and the municipal EMS providers — the oversight partners — work together cooperatively, and their roles are well understood. The oversight partners and paramedics share a general goodwill and a highly professional attitude and approach. As with the practices of Ontario's regulatory colleges, many checks and balances are woven into the emergency pre-hospital care system; these collectively support paramedics' safe practice. For example:

²³⁰ See Volume 2 for HPRAC's criteria and process.

²³¹ RNAO, consultation submission, July 30, 2013.

- EHSB acts as the profession's regulator through the administration and enforcement of the *Ambulance Act*; sets standards for education, evaluation and CME; conducts aspects of the complaints process; and engages in oversight of all aspects of the system, including those delivered by the municipal EMS providers and the base hospitals.
- The municipal EMS providers have responsibilities under the *Ambulance Act*, including enforcing standards; as well, they provide some CME programs, conduct aspects of the complaints process and maintain high standards for the operational end of the delivery of paramedic services.
- The base hospital program has responsibilities under the *Ambulance Act*, including providing quality assurance of paramedics' activities; ensuring initial and ongoing competence for the performance of controlled acts through certification and recertification and providing clinical-related CME programs; and providing guidance and medical advice to paramedics. In addition, base hospitals establish policies and protocols to enable delegation and patching in accordance with legislated requirements and standards; and conduct aspects of the complaints process.
- Individual paramedics graduate from approved and often accredited programs take a province-wide exam, obtain initial certification and maintain that certification, engage in self-reporting of errors, are comprehensively held to account for their activities through a variety of means and promote a professional culture.

The outcome of the HPRAC assessment process is that the applicant did not pass the risk of harm threshold. Changing the regulatory regime from indirect regulation by government to self-regulation by the profession is not in the public interest. Public safety and quality of care are sufficiently upheld at this time through the current oversight system.

Self-regulation appears to be a polarizing topic among paramedics: many of the consultation comments were provided by rank-and-file paramedics, and roughly half of the comments received were not in favour of regulation. As well, consultation comments were sometimes supported by evidence in the literature review. Some consultation stakeholders also cited a lack of evidence for risk of harm, and the literature review only presented qualitative data on the examined risks to patient safety due to limitations to quantitative data. The information available suggests that paramedic practice, including providing scene management while delivering care, may pose unique patient-safety risks.

In addition, a general theme of the consultation comments, expressed by both supporters and non-supporters of regulation, was the potential for risk of harm based on paramedics' decision-making and professional activities. Both consultation comments and the literature review elaborated on this theme by tying this concern to the expansion of paramedics' scope of practice, which may be out of step with the educational/training system. HPRAC did not uncover evidence to indicate that paramedics performing controlled acts outside of delegation through the base hospital program (as proposed by OPA) would be in the public interest; at the same time, the evidence indicates that the delegation of controlled acts through specialized medical directives and patching, and other features of the current oversight system, adequately mitigates risks.

In general, necessary updates to the pre-hospital emergency care system may ultimately require a broadening view and approach to the paramedic profession and a concurrent replacement of

MOHLTC's focus on the provision of ambulance services. Legislative changes could include title protection for the profession, for example, in order to ensure that all paramedic-type services occur within the base hospital program.

Further, if the profession continues to evolve, it would be prudent to ensure that the paramedic education/training system adequately prepares paramedics for the realities of practice. In Ontario, nascent community paramedicine programs represent such an evolution of the profession. Community paramedics need to be prepared for safe practice through appropriate education and training, and all paramedics need to be able to make decisions and engage in scene management in order to provide high-quality, effective care. Prudent uptake of evolutions in the practice of paramedicine will require a thorough discussion of the reasonable outer limits of paramedics' scope of practice as well as the relevancy of paramedics' current educational preparation.

HPRAC has learned that safe practice is a product of the current oversight system. As a result, public protection will be upheld if paramedics always practise within the current oversight system, regardless of practice setting, and understanding that NET staff are not "paramedics." Revisions to the ALS and BLS standards to ensure that all medical acts are overseen by base hospital physicians will further support patient safety. The base hospital program in Ontario is prepared and willing to evolve in step with the paramedic profession, and HPRAC commends its patient-centred approach.

There is room for improvement within the oversight system. Wherever possible, the system should be streamlined to reduce complexity and, at the same time, made more comprehensive, with the oversight partners working together for change. In some cases, the role of each of the oversight partners will require revision; in other cases, the oversight partners will be required to work together in a different or new way. Links between MOHLTC and the municipal EMS providers could be strengthened by having municipalities report directly to MOHLTC on patient-safety matters, wherever appropriate. These kinds of changes will help MOHLTC properly understand how paramedics are performing in the province and how the system is working as a whole. Some of Ontario's municipalities are currently engaged in a province-wide benchmarking initiative that includes the reporting of data on common municipal services. There is an opportunity to build on the spirit of this initiative and expand data sharing and the implementation of best practices in the delivery of patient care across the province.

For example, the complaints process could be updated to increase transparency, improve efficiency and enable proper data management. Changes could include choosing a champion to manage the process, expanding the process to include all complaints, involving patients by making the complaints process publicly available and standardizing the process across all base hospitals and municipal EMS providers. Cascade effects would include promoting procedural fairness for paramedics and improving the public's knowledge. The principles involved in updating the complaints process could be applied to all programming within the pre-hospital emergency care system.

In the absence of self-regulation under the RHPA, enhanced interprofessional care opportunities would enable paramedics to grow their profession's profile amongst peers while enhancing public safety. Stakeholder views and evidence from the literature coalesced around interprofessional care: stakeholders expressed paramedics' interest and preparation for enhanced

interprofessional care opportunities; and the evidence supports IPC as a patient safety-improvement tool. Consistently utilizing FHRCO's IPC eTool, a similar tool or its guiding principles will enhance patient safety as well as paramedics' IPC experience. In a similar way, the development of a paramedic code of ethics, applicable to all practitioners, would be beneficial to both practitioners and patients.

Appendix A: About HPRAC

HPRAC was established under the *Regulated Health Professions Act, 1991* (RHPA) with a duty to advise the Minister of Health and Long-Term Care on matters related to the regulation of health professions in Ontario. This duty includes providing advice to the Minister on:

- Whether unregulated health professions should be regulated;
- Whether regulated health professions should no longer be regulated;
- Amendments to the RHPA;
- Amendments to a health profession's Act or a regulation under any of those Acts;
- Matters concerning the quality-assurance programs and patient-relations programs undertaken by health colleges; and
- Any matter the Minister refers to HPRAC relating to the regulation of the health professions.

In providing its advice and preparing its recommendations, HPRAC is independent of the Minister of Health and Long-Term Care, the Ministry of Health and Long-Term Care (MOHLTC), the regulated health colleges, regulated health professional and provider associations, and stakeholders that have an interest in issues on which it provides advice. This ensures that HPRAC is free from constraining alliances and conflict of interest and that it is able to carry out its activities in a fair and unbiased manner.

HPRAC presents its recommendations in a report to the Minister. Recommendations are advisory only and the Minister is not bound to accept HPRAC's advice. The report is confidential, although the Minister may choose to publicly release an HPRAC report. Any follow-up action is at the discretion of the Minister. Should the Minister choose to accept HPRAC's advice, MOHLTC is responsible for implementation based on the direction of the government.

In developing its advice to the Minister, HPRAC strives to ensure that its processes are thorough, timely and efficient, and built on a foundation of fairness, transparency and evidence-based decision-making. HPRAC undertakes research to support its conclusions, drawing on organizations and individuals with relevant expertise, both in Ontario and elsewhere, and adjusts its consultation process for each profession it considers.

Appendix B: Paramedic and EMA Consultation Program

HPRAC's Consultation Approach

When a referral is received from the Minister, HPRAC strives to determine the key public interest concerns and tries to understand all relevant perspectives on the issues. Each referral proceeds through a multi-stage process in which information and responses are requested from, and often shared with, stakeholders. HPRAC conducts literature, jurisdictional and jurisprudence reviews, and engages in key informant interviews. Further research and analysis help HPRAC determine where additional information is required.

Stakeholder input is important to HPRAC when it develops its recommendations to the Minister. As part of its consultation process, HPRAC notifies and consults with stakeholders that could be affected by its recommendations, including regulatory health colleges, health profession associations, health care providers and the public. In general, the following key principles are used in the development of the consultation program:

- The inclusion of interested stakeholders and members of the public at a level of involvement that reflects their needs and interests.
- Flexibility in responding to unanticipated issues and stakeholder input throughout the referral period.
- An expectation that the consultation process will crystallize broad themes as well as highlight unanticipated "outlier" issues. The data are not expected to indicate wholesale and definitive support for, or opposition to, a particular topic. Respondents self-select to participate in the consultation process and may not be representative of a larger group.
- A commitment to incorporating issues, concerns, comments and perspectives into the recommendation-making process.
- Ensuring that all consultation material is available in both official languages (on request, HPRAC will provide information in accessible formats).

HPRAC may consult with selected individuals and organizations if it needs additional information to complete its work. Persons or organizations with identified expertise or a stake in the issue may be invited, at HPRAC's discretion, to make presentations, reports or submissions. See Table 1 for a list of organizations consulted for this referral.

For the paramedic referral, HPRAC published a link to an online survey on its website and stakeholders either accessed the survey through this portal, sent a copy of the completed survey to HPRAC's office or provided their views in a letter.

Risk of Harm

The risk of harm concept is fundamental to the protection of the public and thus this principle is woven into the fabric of the RHPA.

For this referral, HPRAC followed the following approach²³² to risk of harm in its evaluation of whether the paramedic profession should be self-regulated under the RHPA:

The term risk of harm refers to actions where a substantial risk of physical or mental harm may result from the practice of the profession. This criterion is intended to provide a clear articulation of the degree of harm posed by the profession to the health and safety of the public. In addressing the risk of harm in this context, the applicant is asked to identify the risks associated with the practice of the profession concerned, as distinct from risks inherent in the area of health care within which the profession operates.

Public Interest

HPRAC believes that the primary purpose of self-regulation is the advancement of the public interest (and not, e.g., the interests of the profession). The public interest is the fundamental ground upon which everything else is founded. It is a basic moral precept that has become enshrined in the ethical codes of the health professions and enforced by professional self-regulation. From it are derived several legislative principles that reflect a broad consensus of societal values, including the prevention of harm, the promotion of the public good, the acknowledgement of personal autonomy and the need to adapt to change.²³³

The Minister's duties are also set out in the RHPA: "to ensure that the health professions are regulated and co-ordinated in the public interest, that appropriate standards of practice are developed and maintained and that individuals have access to services provided by the health professions of their choice and that they are treated with sensitivity and respect in their dealings with health professionals, the Colleges and the Board."²³⁴

Table 1. Paramedic Referral: Organizational Stakeholders

Type	Organization/Individual
Regulatory College	College of Audiologists and Speech-Language Pathologists of Ontario
Regulatory College	College of Chiropractors of Ontario

²³² HPRAC, *Regulation of a New Health Profession under the Regulated Health Professions Act (RHPA) 1991: Criteria and Process*.

²³³ HPRAC, *An Interim Report to the Minister of Health and Long-Term Care on Mechanisms to Facilitate and Support Interprofessional Collaboration among Health Colleges and Regulated Health Professionals*, March 2008, 3, accessed December 13, 2013,

http://www.health.gov.on.ca/en/common/ministry/publications/reports/hprac_08/2_hprac_interpro_20080300.pdf.

²³⁴ *Regulated Health Professions Act, 1991*, S.O. 1991, c. 18, s. 3.

Type	Organization/Individual
Regulatory College	College of Chiropractors of Ontario
Regulatory College	College of Dental Hygienists of Ontario
Regulatory College	College of Dental Technologists of Ontario
Regulatory College	College of Denturists of Ontario
Regulatory College	College of Dietitians of Ontario
Regulatory College	College of Massage Therapists of Ontario
Regulatory College	College of Medical Laboratory Technologists of Ontario
Regulatory College	College of Medical Radiation Technologists of Ontario
Regulatory College	College of Midwives of Ontario
Regulatory College	College of Nurses of Ontario
Regulatory College	College of Occupational Therapists of Ontario
Regulatory College	College of Opticians of Ontario
Regulatory College	College of Optometrists of Ontario
Regulatory College	College of Physicians and Surgeons of Ontario
Regulatory College	College of Physiotherapists of Ontario
Regulatory College	College of Psychologists of Ontario
Regulatory College	College of Respiratory Therapists of Ontario
Regulatory College	Ontario College of Pharmacists
Regulatory College	Royal College of Dental Surgeons of Ontario
Regulatory College	Transitional Council of the College of Traditional Chinese Medicine Practitioners and Acupuncturists of Ontario
Regulatory College	Transitional Council of the College of Homeopathy of Ontario
Regulatory College	Transitional Council of the College of Kinesiology of Ontario
Regulatory College	Transitional Council of the College of Naturopathy of Ontario
Regulatory College	Transitional Council of the College of Registered Psychotherapists and Registered Mental Health Therapists of Ontario
Regulatory College	Board of Directors of Drugless Therapy – Naturopathy
Regulated Professional Association	Association of Dental Technologists of Ontario
Regulated Professional Association	Association of Ontario Midwives

Type	Organization/Individual
Regulated Professional Association	Denturist Association of Ontario
Regulated Professional Association	Dietitians of Canada
Regulated Professional Association	Nurse Practitioners' Association of Ontario
Regulated Professional Association	Ontario Association of Medical Laboratories
Regulated Professional Association	Ontario Association of Medical Radiation Technologists
Regulated Professional Association	Naturopathic Doctors Ontario (formerly the Ontario Association of Naturopathic Doctors)
Regulated Professional Association	Ontario Association of Optometrists
Regulated Professional Association	Ontario Association of Psychological Associates
Regulated Professional Association	Ontario Association of Speech-Language Pathologists and Audiologists
Regulated Professional Association	Ontario Chiropractic Association
Regulated Professional Association	Ontario Dental Association
Regulated Professional Association	Ontario Dental Hygienists Association
Regulated Professional Association	Ontario Medical Association
Regulated Professional Association	Ontario Nurses' Association
Regulated Professional Association	Ontario Opticians Association
Regulated Professional Association	Ontario Pharmacists Association
Regulated Professional Association	Ontario Physiotherapy Association
Regulated Professional	Ontario Podiatric Medical Association

Type	Organization/Individual
Association	
Regulated Professional Association	Ontario Psychiatric Association
Regulated Professional Association	Ontario Psychological Association
Regulated Professional Association	Ontario Society of Chiropractors
Regulated Professional Association	Ontario Society of Medical Technologists
Regulated Professional Association	Ontario Society of Occupational Therapists
Regulated Professional Association	Registered Massage Therapists' Association of Ontario
Regulated Professional Association	Registered Nurses' Association of Ontario
Regulated Professional Association	Registered Practical Nurses Association of Ontario
Regulated Professional Association	Respiratory Therapy Society of Ontario
Professional Association	Ontario Society of Diagnostic Medical Sonographers
Professional Association	Canadian Association of Physician Assistants
Professional Association	Ontario Paramedic Association
Professional Association	Paramedic Association of Manitoba
Professional Association	L'Association professionnelle des paramédics du Québec
Professional Association	Paramedic Association of Newfoundland & Labrador
Other Canadian Paramedic Regulatory College	Emergency Medical Assistants Licensing Board, Ministry of Health, British Columbia
Other Canadian Paramedic Regulatory College	Alberta College of Paramedics
Other Canadian Paramedic Regulatory College	Saskatchewan College of Paramedics
Other Canadian Paramedic Regulatory College	Paramedic Association of New Brunswick

Type	Organization/Individual
Other Canadian Paramedic Regulatory College	College of Paramedics of Nova Scotia
Organization/Group	Paramedic Association of Canada
Organization/Group	National Registry of Emergency Medical Technicians [United States]
Organization/Group	Association of Municipal Emergency Medical Services of Ontario
Organization/Group	Canadian Medical Association
Organization/Group	Canadian Association of Emergency Physicians
Organization/Group	Society for Prehospital Educators in Canada
Organization/Group	Trauma Association of Canada
Organization/Group	National EMS Management Association
Organization/Group	Ontario Professional Fire Fighter's Association
Organization/Group	Emergency Medical Services Chiefs of Canada (EMSCC)
Organization/Group	Ontario Hospital Association
Organization/Group	Patients' Association of Canada
Organization/Group	Ontario Association of Paramedic Chiefs
Organization/Group	Canadian Organization of Paramedic Regulators
Organization/Group	Ontario Volunteer Emergency Squad
Organization/Group	Toronto Paramedic Association
LHINs	14 LHIN CEOs
Hospital CEOs	All hospital CEOs in Ontario
Educational Institutions	All health and medical faculties of Ontario universities
Ontario Paramedic Educational Institutes	Algonquin College
Ontario Paramedic Educational Institutes	Cambrian College
Ontario Paramedic Educational Institutes	Canadian Career College – Sudbury Campus
Ontario Paramedic Educational Institutes	Centennial College
Ontario Paramedic Educational Institutes	Collège Boréal

Type	Organization/Individual
Ontario Paramedic Educational Institutes	Conestoga College
Ontario Paramedic Educational Institutes	Confederation College
Ontario Paramedic Educational Institutes	CTS Canadian Career College
Ontario Paramedic Educational Institutes	Durham College
Ontario Paramedic Educational Institutes	Fanshawe College
Ontario Paramedic Educational Institutes	Fleming College
Ontario Paramedic Educational Institutes	Georgian College
Ontario Paramedic Educational Institutes	Humber College
Ontario Paramedic Educational Institutes	La Cité Collégiale
Ontario Paramedic Educational Institutes	Lambton College
Ontario Paramedic Educational Institutes	Loyalist College
Ontario Paramedic Educational Institutes	Niagara College
Ontario Paramedic Educational Institutes	Northern College
Ontario Paramedic Educational Institutes	Ontario College of Health & Technology
Ontario Paramedic Educational Institutes	St. Clair College
Ontario Paramedic Educational Institutes	St. Lawrence College
Ontario Paramedic Educational Institutes	Trillium College
Ontario Paramedic	Ornge

Type	Organization/Individual
Educational Institutes	
Ontario Paramedic Educational Institutes	Toronto Emergency Medical Services
Base Hospitals	Medical Directors of Ontario Base Hospitals
Service Providers	EMS providers in Ontario
Service Providers	Air ambulance service providers in Ontario
Union	Ontario Public Service Employees Union (OPSEU)
Union	Canadian Union of Public Employees (CUPE)
MOHLTC	Malcolm Bates, Director of the Emergency Health Services Branch of the MOHLTC
MOHLTC	Dr. Anthony Campeau, Senior Manager of Operations for EHSB, MOHLTC
MOHLTC	Richard Jackson, Director, Air Ambulance Program Oversight
MOHLTC	Ann Schrager, Manager (Acting), Implementation, Access to Care and Wait Times
MOHLTC	Rachel Kampus, Director (Acting), Performance Improvement and Compliance Branch
Academic/Expert	Dr. Samir Sinha, Director of Geriatrics at Mount Sinai & University Health Network, lead Ontario's Seniors Care Strategy

Consultation Questionnaire

Purpose of the Survey

The Minister of Health and Long-Term Care, the Honourable Deb. Matthews, has asked the Health Professions Regulatory Advisory Council (HPRAC) to advise whether paramedics and emergency medical attendants should be regulated under the RHPA, and if so, what would be the appropriate scope of practice, controlled acts and titles authorized to the profession.

Many organizations and individuals have extensive experience and interest in health care, health professions regulation and the public interest. HPRAC wants to ensure that this experience and interest are fully reflected in its recommendation-making process. Therefore, HPRAC invites comments on the proposal submitted by the Ontario Paramedic Association (OPA) for the regulation of paramedics and Emergency Medical Attendants (EMA) under the *Regulated Health Professions Act, 1991* (RHPA).

Stakeholder feedback will be publicly posted according to HPRAC's access to information guidelines. To view the guidelines, please visit this website:

<http://www.hprac.org/en/privacy.asp>.

To view the RHPA in its entirety, please visit this website: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_91r18_e.htm.

For details on HPRAC's process for regulating a new health profession under the RHPA, please visit this website: <http://www.hprac.org/en/reports/otherresources.asp>.

Participant Information

Name (optional)

Phone (optional)

Email address (optional)

Geographical location (choose one)

- ☐ Ontario
- ☐ Alberta
- ☐ British Columbia
- ☐ Manitoba
- ☐ New Brunswick
- ☐ Newfoundland and Labrador
- ☐ Nova Scotia
- ☐ Prince Edward Island
- ☐ Quebec
- ☐ Saskatchewan
- ☐ Northwest Territories
- ☐ Nunavut
- ☐ Yukon
- ☐ International

I am responding

- ☐ As an individual
- ☐ On behalf of an organization

Primary occupational type (choose one)

- ☐ Regulated health professional
- ☐ Member of profession seeking regulation (i.e., Paramedic or EMA)
- ☐ Member of profession transitioning to regulatory status (i.e., future members of regulatory colleges for homeopathy, naturopathy and psychotherapy)
- ☐ Representative/employee of educational institution
- ☐ Representative/employee of general interest group/association
- ☐ Representative/employee of government ministry/agency
- ☐ Representative/employee of regulatory college
- ☐ Representative/employee of health sector interest group
- ☐ Representative/employee of health services organization
- ☐ Representative/employee of local health integration network (LHIN)
- ☐ Representative/employee of regulated health professional association

- ☐ Representative/employee of unregulated health professional association
- ☐ Unregulated health professional
- ☐ Other

Membership with health regulatory college (if applicable)

- ☐ College of Audiologists and Speech Language Pathologists of Ontario
- ☐ College of Chiropractors of Ontario
- ☐ College of Chiropractors of Ontario
- ☐ College of Dental Hygienists of Ontario
- ☐ Royal College of Dental Surgeons of Ontario
- ☐ College of Dental Technologists of Ontario
- ☐ College of Denturists of Ontario
- ☐ College of Dietitians of Ontario
- ☐ College of Kinesiologists of Ontario
- ☐ College of Massage Therapists of Ontario
- ☐ College of Medical Laboratory Technologists of Ontario
- ☐ College of Medical Radiation Technologists of Ontario
- ☐ College of Midwives of Ontario
- ☐ College of Nurses of Ontario
- ☐ College of Occupational Therapists of Ontario
- ☐ College of Opticians of Ontario
- ☐ College of Optometrists of Ontario
- ☐ Ontario College of Pharmacists
- ☐ College of Physicians and Surgeons of Ontario
- ☐ College of Physiotherapists of Ontario
- ☐ College of Psychologists of Ontario
- ☐ College of Respiratory Therapists of Ontario
- ☐ College of Traditional Chinese Medicine Practitioners and Acupuncturists of Ontario

Type of employer/organization (choose one)

- ☐ Educational institution
- ☐ General-interest group/association
- ☐ Government ministry/agency

- ☐ Health professions regulatory college
- ☐ Health-sector interest group/association
- ☐ Health services organization
- ☐ Local health integration network (LHIN)
- ☐ Regulated health professional association
- ☐ Unregulated health professional association
- ☐ Other
- ☐ Not Applicable

Organization name (optional)

HPRAC's Criteria and Decision-Making Process

HPRAC uses a two-part assessment to decide whether to recommend a health profession for regulation.

The primary criterion addresses whether the health profession seeking regulation poses a risk of harm to the health and safety of the public. This criterion acts as a gating mechanism. The applicant must meet a risk of harm threshold by presenting a solid, evidence-based argument that there is a risk of harm to the public if the profession remains unregulated.

Once the application meets the risk of harm threshold, it is then assessed on the extent to which it meets the secondary criteria. HPRAC applies the secondary criteria to determine whether regulation under the RHPA is the most appropriate course of action. This level of assessment focuses on profession-specific factors and assesses whether regulation under the RHPA is the best way to protect the public.

The Public Interest

The fundamental principle with respect to health professional regulation under the RHPA is the protection of the public from harm in the delivery of health care.

Section 3 of the RHPA states that "health professions are regulated and co-ordinated in the public interest, that appropriate standards of practice are developed and maintained and that individuals have access to services provided by the health professions of their choice and that they are treated with sensitivity and respect."

When a profession is regulated under the RHPA, its regulatory college is obligated to serve and protect the public interest when carrying out its statutory duties.

- 1) **Has the OPA demonstrated convincingly that it is in the public interest that paramedics and EMAs be regulated under the RHPA?**

Yes ☐

No ☐

HPRAC's Primary Criterion

HPRAC's primary criterion assesses whether the health profession seeking regulation under the RHPA poses a risk of harm to the health and safety of the public, and it is otherwise in the public interest that the particular profession be regulated under the RHPA.

- 2) **Has the OPA demonstrated with evidence that paramedics and EMAs pose a risk of harm to the health and safety of the public if the profession is not regulated under the RHPA?**

Yes (go to 3a) ☐

No (go to 3b) ☐

- 3a) The following statements describe some of the factors that HPRAC takes into consideration when preparing its recommendation. (Additional comments can be made under Question 8.)

Rank the top THREE statements, assigning numbers 1-3 in terms of importance, with 1 being most important, that best support your response to the previous question (i.e., that the OPA has demonstrated with evidence that paramedics and EMAs pose a risk of harm to the health and safety of the public if the profession is not regulated under the RHPA).

_____ The profession is involved in activities that have a significant potential to cause physical or mental harm to the public.

_____ The current oversight structure, including direct and indirect supervision, does not sufficiently protect the public from risk of harm.

_____ The profession is engaged in making decisions or judgments that can have a significant impact on patients' physical or mental health.

_____ The practice environment gives rise to a significant potential for physical or mental harm to the public.

_____ Sufficient evidence was presented regarding risk of harm.

_____ Regulation is required due to the vulnerability of the patient population.

_____ The rate and nature of complaints of harm for this profession are compelling evidence in favour of regulation under the RHPA.

_____ Regulation is required because the practice of the profession involves the performance

of controlled acts.

____ Recent changes in the practice of the profession, such as changes in treatment and/or technology, is compelling evidence in favour of regulation under the RHPA.

____ Other

- 3b)** The following statements describe some of the factors that HPRAC takes into consideration when preparing its recommendation. (Additional comments can be made under Question 8.)

Rank the top THREE statements (assigning numbers 1-3 in terms of importance, with 1 being most important) that best support your response to the previous question (i.e., that the OPA has not demonstrated with evidence that paramedics and EMAs pose a risk of harm if the profession is not regulated under the RHPA).

____ The profession is not involved in activities that have a significant potential to cause physical or mental harm to the public.

____ The current oversight structure, including direct and indirect supervision, is sufficient in protecting the public from risk of harm.

____ The profession does not make decisions or judgments that can have a significant impact on patients' physical or mental health.

____ The practice environment does not give rise to a significant potential for physical or mental harm to the public.

____ Insufficient evidence was presented regarding risk of harm.

____ The profession's patient population does not require special protection.

____ The rate and nature of complaints of harm provides compelling evidence against regulation under the RHPA.

____ For the performance of controlled acts, regulation would not provide a significant, additional protection from risk.

____ Recent changes in the practice of the profession, such as changes in treatment and/or technology, provide compelling evidence against regulation under the RHPA.

____ Other

4) Indicate your level of agreement with each of the statements below. Base your response on the evidence provided by the applicant.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The profession is involved in activities that have a significant potential to cause physical or mental harm to the public.					
The current oversight structure is sufficient in protecting the public from risk of harm.					
The profession is engaged in making decisions or judgments that can have a significant impact on patients' physical or mental health.					
The practice environment gives rise to a significant potential for physical or mental harm to the public.					
Sufficient evidence was presented regarding risk of harm.					
Regulation is required due to the vulnerability of the patient population.					
The rate and nature of complaints of harm for this profession are compelling evidence in favour of regulation under the RHPA.					
Regulation is required because the practice of the profession involves the performance of controlled acts.					
Recent changes in the practice of the profession, such as changes in treatment and/or technology, are compelling evidence in favour of regulation under the RHPA.					

HPRAC's Secondary Criteria

HPRAC's secondary criteria assess the appropriateness of regulation under the RHPA. The criteria:

- Have equal weight;
- Focus on the profession-specific factors and assess whether regulation under the RHPA is, in fact, the most appropriate and effective means to protect the public;
- Provide applicants with an understanding of where the requirements for statutory regulation lie, and, in doing so, give an indication of the issues with which HPRAC is concerned;
- Are intended to identify other salient factors that need to be addressed to ascertain

- whether regulation under the RHPA is in the public interest; and
- Are not intended to provide a barrier that prevents regulation under the RHPA for a profession that meets the primary criteria.

5) Has the OPA demonstrated convincingly that regulation under the RHPA is appropriate for the profession?

Yes (go to 6a) ☐

No (go to 6b) ☐

6a) The following statements describe some of the factors that HPRAC takes into consideration when preparing its recommendation. (Additional comments can be made under Question 8.)

Rank the top FIVE statements, assigning numbers 1-5 in terms of importance, with 1 being most important, that best support your response to the previous question (i.e., that the OPA has demonstrated convincingly that regulation under the RHPA is appropriate for the profession).

___ To a substantial degree, members of the profession exercise professional judgement autonomously in the delivery of care.

___ Members of the profession are sufficiently educated to possess the skills and competencies necessary to deliver safe and competent care on entry to the profession.

___ The profession's practice is supported by a distinct body of evidence-based knowledge.

___ Members of the profession are able to financially support the ongoing costs and responsibilities of regulation.

___ Compared to other regulatory mechanisms, regulation under the RHPA is the most appropriate way to oversee the profession.

___ The profession's leadership, and members of the profession, have shown that they are able and committed to support the public interest mandate of regulation under the RHPA.

___ The profession has shown a willingness and a capacity to effectively collaborate with other professions.

___ With respect to labour mobility, regulation will have a positive impact on the supply and demand of paramedic and EMA practitioners.

___ Regulation of the profession will enhance access to safe, high-quality care.

___ Regulation will have a positive influence on health human resource productivity (e.g., efficiencies will be created, such as reducing the burden on emergency rooms, extending physician capacity and reducing wait times).

___ Regulation will improve patients' health outcomes (i.e., clinical, psychosocial or quality of life).

___ Sufficient evidence was presented regarding the appropriateness of regulation.

- ☐ The current certification process for members of the profession is inadequate.
- ☐ The current supervision and oversight procedures and processes are insufficient.
- ☐ Where paramedics and EMAs provide care alongside regulated health professionals, there is an inadequate process in place to determine their respective roles, relationships, responsibilities and liabilities.
- ☐ Other

6b) The following statements describe some of the factors that HPRAC takes into consideration when preparing its recommendation. (Additional comments can be made under Question 8.)

Rank the top FIVE statements, assigning numbers 1-5 in terms of importance, with 1 being most important, that best support your response to the previous question (i.e., that the OPA has not demonstrated convincingly that regulation under the RHPA is appropriate for the profession).

- ☐ Members of the profession do not exercise professional judgement autonomously in the delivery of care, or do so only to a limited extent.
- ☐ Members of the profession are not sufficiently educated to possess the skills and competencies necessary to deliver safe and competent care on entry to the profession.
- ☐ The profession's practice is not supported by a distinct body of evidence-based knowledge.
- ☐ Members of the profession are not able to financially support the ongoing costs and responsibilities of regulation.
- ☐ Compared to other regulatory mechanisms, regulation under the RHPA is not the most appropriate way to oversee the profession.
- ☐ The profession's leadership, and members of the profession, have not shown that they are able and committed to support the public interest mandate of regulation under the RHPA.
- ☐ The profession has not shown a willingness and a capacity to effectively collaborate with other professions.
- ☐ With respect to labour mobility, regulation will have a negative impact on the supply and demand of paramedic and EMA practitioners.
- ☐ Regulation of the profession will not enhance access to safe, high-quality care.
- ☐ Regulation will have a neutral or negative influence on health human resource productivity (e.g., minimal impact on reducing the burden on emergency rooms; extending physician capacity; and reducing wait times).
- ☐ Regulation will not improve patients' health outcomes (i.e., clinical, psychosocial or quality of life).
- ☐ Insufficient evidence was presented regarding the appropriateness of regulation.

- _____ The current certification process for members of the profession is adequate.
- _____ The current supervision and oversight procedures and processes are sufficient.
- _____ Where paramedics and EMAs work alongside regulated health professionals, there is an adequate process in place to determine their respective roles, relationships, responsibilities and liabilities.
- _____ Other

7) Indicate your level of agreement with each of the statements below. Base your response on the evidence provided by the applicant.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
To a substantial degree, members of the profession exercise professional judgement autonomously in the delivery of care.					
Members of the profession are sufficiently educated to possess the skills and competencies necessary to deliver safe and competent care on entry to the profession.					
The profession's practice is supported by a distinct body of evidence-based knowledge.					
Members of the profession are able to financially support the ongoing costs and responsibilities of regulation.					
Compared to other regulatory mechanisms, regulation under the RHPA is the most appropriate way to oversee the profession.					
The profession's leadership, and members of the profession, have shown that they are able and committed to support the public interest mandate of regulation under the RHPA.					
The profession has shown a willingness and a capacity to effectively collaborate with other professions.					
With respect to labour mobility, regulation will have a positive impact on the supply and demand of paramedic and EMA practitioners.					
Regulation of the profession will enhance access to safe, high-quality care.					
Regulation will have a positive influence on health human resource productivity (e.g., efficiencies will be created, such as reducing					

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
the burden on emergency rooms, extending physician capacity and reducing wait times).					
Regulation will improve patients' health outcomes (i.e., clinical, psychosocial or quality of life).					
Sufficient evidence was presented regarding the appropriateness of regulation.					
The current certification process for members of the profession is adequate.					
The current supervision and oversight procedures and processes are sufficient.					
Where paramedics and EMAs provide care alongside regulated health professionals, there is an adequate process in place to determine their respective roles, relationships, responsibilities and liabilities.					

8) Do you have any other general comments?

Access to Information

Comments submitted will be considered by HPRAC and will help it to determine appropriate recommendations to make to the Minister of Health and Long-Term Care. To ensure transparency and encourage open dialogue, the feedback received by HPRAC may be posted on its website in accordance with its Privacy Statement, which is available at: www.hprac.org/en/privacy.asp.

Please note that unless requested and otherwise agreed to by HPRAC, any information or comments received from organizations will be considered public information and may be used and disclosed by HPRAC. HPRAC may disclose materials or comments, or summaries of them, to other interested parties (during and after the consultation period). An individual who makes a submission and who indicates an affiliation with an organization in his or her submission will be considered to have made his or her submission on behalf of the affiliated organization.

HPRAC will not disclose any personal information contained in the submission of an individual who does not specify an organizational affiliation in his or her submission without the individual's consent unless required to do so by law. However, HPRAC may use and disclose the content of the individual's submission to assist it in fulfilling its statutory mandate.

HPRAC reserves the right to refuse to post a submission, in whole or in part, that, in its sole discretion, is unrelated to the issue under consultation and is abusive, obscene, harassing, threatening or includes defamatory comments. If you have any questions about the collection of this information, you can contact HPRAC at 416-326-1550.

Appendix C: OPA Application

PARAMEDIC

Health Professions Regulatory Advisory Council Application

Regulation of Paramedics under the *Regulated Health Professions Act, 1991*

March 13, 2013



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Introduction

...the responsible and experienced members of a profession or occupation on whom the power of self-government is conferred should be in the best position to set the standards to be met and the qualifications of anyone who aspires to enter the profession or occupation (Casey, 2005, p. 16-1).

Self-regulation of paramedics in Ontario under the *Regulated Health Professions Act, 1991 (RHPA)* has been an issue for many years, dating back at least to the 1998 report of the Land Ambulance Transition Task Force (LATT), which recommended this step "to address the key deficiency of the ambulance service regulatory framework" (1998, p. 7). The Task Force's reasons for recommending this step were to recognize:

- the enhanced need for consistent training and regulation of paramedics in a decentralized management system to ensure integration and accountability;
- the need to update the status and responsibilities of paramedics consistent with the evolution of the nature of their work – from untrained transportation provider to highly trained health professional;
- the need to remedy the inconsistency of giving self-regulatory status to professionals, such as opticians, who perform non-invasive acts but not to paramedics who are delegated to administer powerful drugs and perform invasive acts; and
- the nature of the responsibility given to paramedics to make decisions about pre-hospital care for, and to take action on patients who may be helpless or unconscious (1998, p. 7).

If anything, these needs have only grown more urgent since the LATT report was issued, as paramedic practice continues to evolve and the circumstances in which paramedics are called upon to deliver health care continue to extend, such as with recent initiatives in Canada and other countries to introduce Community Paramedic Programs (Nolan, Hillier & D'Angelo, 2012).

In considering self-regulation of paramedics under the *RHPA*, it is essential to recognize that "licensed" paramedics¹ (those working for Paramedic Services or Emergency Medical Services (EMS)) in Ontario are *not* currently unregulated (although practitioners

¹ Terminology used in Ontario's current regulatory system for paramedics is not consistent with the *RHPA*, nor entirely self-consistent. All paramedics are both "certified" and "registered" by the MOHLTC EHSB, but this does not give them a license to practice as paramedics, particularly in the performance of controlled acts. The latter requires employment by an Ambulance Service (i.e., EMS or Paramedic Service) and further "certification" by the medical director of a Base Hospital Program, which is thus somewhat akin to "registration" as used by regulatory Colleges under the *RHPA*. Paramedics who are not employed by an EMS cannot obtain the latter certification. Thus, "certification" and "certified" are ambiguous in this context, whereas "registration" and "registered" do not have the same meaning as they do under the *RHPA*, where they replace the use of "licence" found in the *Health Disciplines Act, 1974* that the *RHPA* superseded. In order to avoid unwieldy locutions, this application uses "licensed" and "unlicensed" (in quotation marks), to refer to paramedics working for EMS with Base Hospital Program certification and to paramedics not working for EMS, respectively. "Registered paramedics", on the other hand, will be used to refer to *all* paramedics regulated under the *RHPA* by a College of Paramedics.

who have satisfied educational requirements and the Ministry of Health and Long-Term Care (MOHLTC) Emergency Health Services Branch's (EHSB) certification requirements, but are not employed by an EMS, are *not* regulated). On the contrary, they are quite extensively regulated under the *Ambulance Act*, 1990 by the MOHLTC EHSB, both directly and through their employer (the EMS) and the Base Hospital Program with which the EMS has a performance agreement. This application for self-regulation, therefore, must be understood as a *transformation* of the existing regulatory system for paramedics, rather than the introduction of such a system. "Licensed" paramedics are regulated under the *Ambulance Act* (which includes specification under *Ontario Regulation 257/00* of the controlled acts that paramedics are authorized to perform) because paramedic practice exhibits precisely the risk of harm that the Health Professions Regulatory Advisory Council (HPRAC) requires in order to consider other criteria relevant to self-regulation. In other words, the current regulatory system for "licensed" paramedics in Ontario exists for the same reason and with the same intent as does the system of self-regulation under the *RHPA*, namely, to protect the public interest.

The current application intends to show that self-regulation for paramedics under the *RHPA* is a more effective and appropriate way to protect the public interest and to enable successful interprofessional collaboration between paramedics and other regulated health professions. First, it would increase access to health care, by enabling the provision of registered paramedics beyond those employed by EMS (Nolan, Hillier & D'Angelo, 2012). Given the health human resource constraints that Ontario faces (similar to many developed regions) and the availability of newly MOHLTC EHSB-certified paramedics (around 750 per year), self-regulation would make it possible for the investment of time, money and effort on the part of both individual practitioners and educational institutions to contribute more effectively to addressing the healthcare needs of Ontario residents.

Second, paramedic self-regulation would increase public choice of healthcare provider, as registered paramedics would be able to provide health services within their scope of practice (including controlled acts) beyond prehospital environments, such as in community clinics. It would also provide ongoing opportunities for paramedics to maintain their clinical skills through predictable service provision, in contrast to the unpredictable nature of emergency ambulance calls, a particular concern for high-risk skills (Vrotsos, Pirrallo, Guse & Aufderheide, 2008).

Third, it would place greater emphasis on paramedics' responsibility for maintaining their competency and improving their own medical and related knowledge. The current system of continuing medical education and recertification is highly prescriptive, predominantly technical, heavily course-based, and oriented towards annual recertification. Self-regulated health professions such as physicians and nurses have far greater flexibility to determine how they maintain and enhance their professional abilities and knowledge. Here we touch on an important, although often understated aspect of self-regulation, which is that it is not just the *profession's* regulation of itself, but equally the *individual's* regulation of him or herself. In other words, the privilege granted by self-regulation extends from government through the regulatory College right down to the

individual practitioner. One of the primary concerns about self-regulation expressed by some paramedics in Ontario is that it entails another level of bureaucracy on top of what some see as an already highly bureaucratic system. The Ontario Paramedics Association's (OPA) view is that, by reducing bureaucratic layers, self-regulation under the *RHPA* through a College of Paramedics will improve the protection of the public, and concomitantly enhance the practice of paramedics throughout the province, while bringing paramedic practice fully into alignment with the health care system.

To reiterate, the basis for self-regulation set out in the current application is that the current system is complicated, inefficient, and fails to include paramedics working outside of an EMS. As such, it does not fully protect the public, nor is it properly aligned with the regulation of allied health professions. The OPA's view is that the details contained in this application make a compelling case for "the need to update the status and responsibilities of paramedics consistent with the evolution of the nature of their work".

It should be noted that this application does not include Emergency Medical Responders (EMR) as defined in the National Occupational Competency Profile (NOCP). In the OPA's view, their inclusion within a College of Paramedics would be inappropriate, as the standards of practice of EMRs does not reach the risk of harm threshold that self-regulation under the *RHPA* requires. In particular, EMRs are not certified to perform controlled acts.²

Risk of Harm

General Description of Services Provided by Paramedics

In general terms, the services provided by paramedics include: triage; initial and ongoing patient assessment and diagnostics through patient history, physical assessment and diagnostic tests; therapeutic treatment and interventions to stabilize patients using invasive and non-invasive modalities; scene management; and relocation and transportation of patients. These services are provided predominantly in the out-of-hospital environment, although they have started to be provided in non-traditional environments as well.

Paramedic practice is described in the Ontario Ministry of Training, Colleges and Universities' (MTCU) *Paramedic Program Standard* as follows:

The practice of paramedicine requires high levels of accuracy, responsibility, and accountability and is founded on caring and compassion...the field of paramedicine has a strong physical requirement and is a high-stress occupation...

The practice of paramedicine requires the ability to act independently,

² Note that "EMR" is different from "EMA", a legacy definition used in the Ambulance Act for grandfathering purposes that no longer has any corresponding entry-to-practice mechanism.

simultaneous with the ability to work collaboratively with patients, other paramedics, other emergency services personnel, ambulance communications officers, physicians, nurses, and other allied health care personnel. Being able to effectively communicate with patients and families in stressful situations is critical to the role of the paramedic. (MTCU, 2008, p. 4)

Paramedic services are delivered according to the competencies and standards of a paramedic's level. As in all jurisdictions in Canada, Ontario has three levels of paramedic, which in this province are classified as Primary Care Paramedic (PCP), Advanced Care Paramedic (ACP) and Critical Care Paramedic (CCP). Each level builds on the competencies and skills of the prior level and encompasses its scope of practice. Each level also has a specific educational requirement, which again builds on the prior level.

Primary Care Paramedic (PCP)

A PCP responds to both emergency and non-emergency calls and provides basic medical care and transportation for patients. They work with another PCP or ACP partner and perform interventions with the equipment typically found on an ambulance. They constitute the largest group of paramedics in Canada and are expected to demonstrate excellent decision-making skills, based on sound knowledge and principles. In Ontario, PCPs can conduct patient assessments, provide basic airway management, administer oxygen, perform cardio pulmonary resuscitation (CPR), provide basic trauma care, and administer symptom relief medications by various routes and perform manual and semi-automated external defibrillation (SAED).

Advanced Care Paramedic (ACP)

The primary focus of the ACP is to provide advanced emergency medical care and transportation for critical and emergent patients and perform interventions with the basic and advanced equipment typically found on an ambulance. ACPs are expected to build upon the foundation of PCP competencies, and apply their added knowledge and skills to provide enhanced levels of assessment and care. ACPs may implement treatment measures that are invasive and/or pharmacological in nature. Competencies specific to ACPs include providing advanced airway management, performing laryngoscopy and removal of foreign body obstruction using forceps, providing basic field mechanical ventilation, conducting 12 lead ECG interpretation, administering a more extensive list of medications including intravenous medication, and performing manual defibrillation and other electrical therapies.

Critical Care Paramedic (CCP)

The CCP is expected to perform thorough assessments that include the interpretation of patient laboratory and radiological data. CCPs can implement treatment measures, typically those that are invasive and/or pharmacological in nature, both autonomously and after consultation with medical authorities. Competencies specific to CCPs include

administering a wide variety of drugs, performing advanced airway procedures such as needle thoracostomy and cricothyroidotomy, and interpreting x-rays and lab blood values. This is currently the highest level of paramedic in Canada.

Diagnostic Modalities

The general diagnostic competencies outlined in the National Occupational Competency Profile for Paramedics (NOCP) developed by the Paramedic Association of Canada comprise the following:

- 4.1. Conduct triage in a multiple-patient incident.
- 4.2. Obtain patient history.
- 4.3. Conduct complete physical assessment demonstrating appropriate use of inspection, palpation, percussion and auscultation.
- 4.4. Assess vital signs.
- 4.5. Utilize diagnostic tests (NOCP, 2011, p. 11)

Paramedics also utilize multiple diagnostic tools, equipment and tests which include: stethoscopes; blood pressure measuring devices; temperature probes; percussion, palpation, auscultation and inspection; recognized neurological tests including the Glasgow Coma Scale, Cincinnati Stroke Scale and the Canadian Triage and Acuity Scale; pulse oximetry; end-tidal carbon dioxide monitoring; glucometric testing; and electrocardiograms.

Paramedics in Ontario employ diagnostic modalities in accordance with their level of training and their level of authorization according to *Ontario Regulation 257/00* under the *Ambulance Act, 1990*. However, the specific diagnostic modalities employed by paramedics are not set out in statute, but rather in standards of practice or practice guidelines issued by both the MOHLTC and Base Hospital Programs. The MOHLTC is responsible for two documents, *Basic Life Support Patient Care Standards* (BLS), *Advanced Life Support Patient Care Standards* (ALS).³ The former sets out "the Ministry of Health and Long-Term Care expectations with respect to how paramedics will interact with patients" at a basic life support level, which does not include controlled acts (2007, p. 1). The latter's purpose "is to guide the specifics of patient care that are to be undertaken consistent with the scope of practice of the three occupational levels of paramedics" (2011, p. 2).

The BLS specifies that "providers MUST focus on the following three aspects of patient care:

- a) Identifying serious disruptions to critical functions – airway, breathing, circulation and level of consciousness;
- b) Applying measures⁴ to correct these disruptions as soon as feasible, and,

³ Standards of practice for CCP are not detailed in any MOHLTC documents, but rather in the *Adult and Pediatric Medical Directives and Standing Orders* produced by Ornge, Ontario's primary provider of air ambulance and critical care land transport services.

⁴ I.e., measures appropriate at the BLS standard.

- c) Determining the need for, and where required, initiating rapid transport. Attempting to make a definitive diagnosis in the field may lead to unnecessary delays in treatment and transport. *Diagnosis is of secondary importance in field practice.*" (2007, p.7)⁵

The general principles of patient assessment in the BLS specify that a paramedic will first of all obtain patient consent or advise about the possible consequences of refusal of treatment (pp. 1-4, 1-13). If consent is granted, a "paramedic will... On all scene calls... assume the existence of serious, potentially life-, limb- and/or function-threatening conditions until assessment indicates otherwise" (p. 1-4) and, concurrent with or following the primary survey, "Establish the chief complaint... Elicit history of present illness or incident" (p. 1-5). More specifically, the paramedic will conduct a primary physical assessment to "note the patient's general appearance, degree of distress. Ensure manual C-spine protection if trauma is obvious, suspect or unknown. Assess airway patency, breathing, circulation and level of consciousness and identify critical findings... Determine the need for rapid transport... after completion of the primary survey... Initiate cardiac monitoring [for certain types of calls]... take vital signs... perform complete head to toe assessment or a limited head to toe assessment... if indicated, perform trauma assessments in medical patients, and medical assessments in trauma patients... Formulate a working assessment after the primary and/or secondary survey. List and prioritize problems" (pp. 1-5-1-7).

Paramedics' Areas of Practice

There are few areas of diagnosis, treatment, interventions or modalities that are performed exclusively by paramedics. Where paramedic practice differs from that of other health professions is, first, that it is performed predominantly in the out-of-hospital environment, which is often uncontrolled and can involve confined spaces, poor lighting, adverse weather and dangerous conditions. Second, in most cases, paramedics have to relocate their patients from the scene of incident and transport them to medical facilities, either by land or by air,⁶ and provide ongoing assessment, monitoring and treatment enroute. Paramedics are the only healthcare professionals to provide such services on a routine basis and for this reason are considered by most health professionals to be the subject matter experts in transport medicine.

Out-of-hospital paramedic practice includes patient assessment, diagnosis and administration of treatment and interventions on the side of the highway, industrial sites, homes, businesses, public gathering spaces or anywhere an emergency occurs, with the aim of stabilizing patients either for transportation to a medical facility or to allow them to recover at home. Thus, another area of practice exclusive to paramedics is scene management, which includes assessment and control of risk factors, both physical and psychosocial. Furthermore, unlike most other health professionals, paramedics are also required to perform multiple-trauma triage, for example at the

⁵ It is open to question whether this applies in all cases.

⁶ Specialized training is required to work as a flight paramedic in the aeromedical environment. See p. 24 for further details.

scene of a mass casualty incident. Paramedic services are also performed unsupervised, save where communications with a Base Hospital Program physician are required to administer a particular treatment, as set out in medical directives.⁷ And whereas emergency department (ED) doctors and nurses can call on the resources of their hospital as a whole, paramedics' treatment and interventions depend on the medication and equipment stock in their emergency response vehicle, which for practical and financial reasons is limited.

Paramedic practice also differs from that of all other health professions in the function of transporting patients from the scene of incident to medical care facilities. This involves skills that would not typically be recognized as medical in nature (e.g., safe emergency driving skills), but are nevertheless essential to the profession's effective delivery of services. It also necessitates another skill set, namely the ability to monitor patient condition in a moving land or air ambulance and to intervene if necessary to provide life support. Associated with this transportation function is the requirement to lift and move patients from the scene of the event to the land or air emergency response vehicle. Although other health professionals do transfer patients from hospital beds to stretchers and *vice versa* paramedics do so in the adverse conditions previously mentioned. Extrication of a patient from a confined space such as a motor vehicle collision is another area in which paramedics are recognized as experts. Finally, paramedics are also required to assess and manage the scene of an incident, sometimes with respect to forensic implications. These competencies are detailed in the NOCP (competencies 1.7, 2.1, 3.2, 3.3, 4.2f and 7).

"Licensed" paramedics assess and treat patients following approved and accepted medical protocols and guidelines. The general competencies for therapeutics set out in the NOCP are:

- 5.1. Maintain patency of upper airway and trachea.
- 5.2. Prepare oxygen delivery devices.
- 5.3. Deliver oxygen and administer manual ventilation.
- 5.4. Utilize ventilation equipment.
- 5.5. Implement measures to maintain hemodynamic stability.
- 5.6. Provide basic care for soft tissue injuries.
- 5.7. Immobilize actual and suspected fractures.
- 5.8. Administer medications.

Under each general competency, the NOCP lists a number of subcompetencies.

Several of the competency areas specified in the NOCP (pp. 10-11) are shared by all health professions. These include professional responsibilities, communication, health and safety (although fewer health professions need to practice safe lifting and moving

⁷ Even though MOHLTC and Base Hospital Program medical protocols specify circumstances in which such communication (called "patching") is mandatory, in the event that such patching fails paramedics are authorized to perform the intervention concerned based on their clinical judgment.

techniques), integration and health promotion. The diagnostic and treatment modalities paramedics perform and the services they provide are shared by a number of regulated health professions, including physicians, nurses, nurse practitioners, respiratory therapists and midwives. In terms of controlled acts set out in the *RHPA*, these include: making and communicating assessments and provisional diagnoses to patients or personal representatives; conducting and interpreting diagnostic tests; performing procedures on tissue below the dermis; inserting airway devices into nasal passages and beyond the pharynx; administering substances by injection, and inhalation; administering drugs; applying a form of energy (e.g., transcutaneous cardiac pacing, cardioversion, defibrillation); and managing delivery of a baby.

The areas of practice of unregulated health professions and the services they provide may also include the competency areas of professional responsibilities, communication, health and safety (although fewer health professions need to practice safe lifting and moving techniques), integration and health promotion. However, there are few, if any, areas of paramedic practice involving assessment and diagnostics and therapeutics that unregulated health professions are allowed to perform, since these areas involve one or more controlled acts. Some "unlicensed" paramedics employed by non-emergency patient transfer and event medical services may perform some controlled acts under the license of a physician. Under the "Good Samaritan" provisions of the *RHPA* (s. 29(1)(a)), an individual can perform such acts on an emergency basis, which would also apply to individuals belonging to unregulated health professions. "Unlicensed" paramedics also provide patient transportation services.

Because of their scope of practice, "licensed" paramedics have not typically worked directly in conjunction with other health professions in the out-of-hospital environment save in two circumstances. First, for certain controlled acts, paramedics in Ontario are required to contact (or "patch to") a Base Hospital Program physician for authorization. The ALS provides the following details:

In cases where a treatment option requires the prior authorization by the BHP (i.e. mandatory provincial patch point or mandatory BH patch point) AND the BHP cannot be reached despite reasonable attempts by the paramedic to establish contact, a paramedic may initiate the required treatment without the requisite online authorization if the patient is in severe distress and, in the paramedic's opinion, the medical directive would otherwise apply. Clinical judgment must be applied and an acceptable standard of care must be met (MOHLTC EHSB, 2011, p. 9).⁸

Second, after transportation to a medical facility, paramedics transfer their patients to the care of other health professions (typically ED nurses and physicians), which involves communication of all the relevant information gathered through assessment,

⁸ Thus mandatory patching is similar to, or possibly identical with, obtaining a direct order to perform a controlled act, except that a "licensed" paramedic is also authorized to perform the act in case the patch fails. It is unclear under *O. Reg. 257/00* whether such acts are delegated by medical directive or by the patch itself.

diagnosis, treatment and monitoring in the form of a patient report. In the process of transfer of care, the paramedics remain responsible for safety and care of the patient while he or she remains on their stretcher, and for monitoring and reassessing the patient's status (see, for example, Sunnybrook-Osler Centre for Prehospital Care, 2006, pp. 79-80). Patients are also transferred to paramedic care for interfacility transfer when this is determined to be medically advisable.

Paramedics may also be called on to assist in the ED, for example, by maintaining application of their diagnostic instruments such as cardiac monitors, continuing treatments such as CPR and other resuscitation efforts along with the hospital team, or continuing interventions such as transcutaneous pacing or continuous positive airway pressure (CPAP) ventilation until hospital staff can prepare their own equipment. Overload in the ED has led to long wait times for such transfer, which then require paramedics to provide ongoing care for unstable patients, for which they are not typically trained (Atack & Maher, 2010, p. 97).

In recent years, there has been growing interest in making use of paramedics' skills and training to provide primary health care in non-emergency environments, in some cases as an adjunct to the work of other health professionals such as nurses and nurse practitioners. Community Paramedic Programs (CPPs) are "a model of care whereby paramedics apply their training and skills in "non-traditional" community-based environments (outside the usual emergency response/transport model)" (International Roundtable on Community Paramedicine website). CPPs are a relatively new and evolving model of health care delivery in Canada, which are being introduced to address health care access issues specific to the elderly and to chronic disease management. Health care services that CPPs offer include immunizations (influenza vaccination), clinics that monitor and record residents' monthly blood glucose, temperatures, heart rates and blood pressures, and referrals to community health services such as nursing and physiotherapy visits that can address specific needs.

One of the most well-known examples in Canada is the Long and Brier Island program in Nova Scotia, which was implemented to address a primary health service access issue in a remote location. Emergency Health Services (EHS) introduced a nurse practitioner (NP) – paramedic – physician model in which residents received primary care and emergency services from an on-site NP and paramedic and an off-site physician. A longitudinal study concluded that "the innovative model of care resulted in decreased cost, increased access, a high level of acceptance and satisfaction and effective collaboration among care providers" (Martin-Misener, Downe-Wamboldt, Cain & Girouard, 2009, p. 1). One study has shown in the U.K. context that this approach "is at least as safe as the standard care provided by EMS and the ED" (Mason, Knowles, Feeman & Snooks, 2008, p. 612).

Acts that entail a Risk of Harm to Patients

The out-of-hospital work environment presents service, practice and treatment challenges exclusive to paramedics. Assessing and treating patients in uncontrolled and weather-affected surroundings poses risks to patients and practitioners not faced by

other health professions. Multi-casualty triage, on-scene immobilization, patient relocation and emergency transport all involve risk of physical harm to patients.

The risk of harm to patients entailed by paramedics' scope of practice encompasses the majority, if not all, of the actions they perform and the services they provide. There are two aspects to this. On the one hand, there is the risk of harm inherent in many of the acts themselves, whether assessments, interventions, the administering of medications or electrical therapies, treatment modalities or services (Bass, p. 16, in Kapp, 2001). That is, an action such as endotracheal intubation or the administration of nitroglycerin carries with it a certain risk of harm because of the very nature of the act (i.e., invasive procedure, pharmacological treatment), which would be the case no matter the health profession of the person performing the act. In particular, it should be recognized that as the recipients of such actions are not in optimal health, they are therefore intrinsically more vulnerable to the harm that such actions can engender. The level of such risk may, of course, be elevated by external conditions, for example settings paramedics encounter frequently, such as the scene of trauma and patient transportation. Outcomes in which patients suffer harm as a result of such inherent risk are often referred to as "adverse events" (Sohn, 2013).

On the other hand, there is also *iatrogenic* risk of harm, i.e., the risk of harm entailed by sub-standard performance of such acts, which is often referred to as "medical error" (Sohn, 2013). Since the beginning of the 21st century, consideration of this type of risk and its reduction or mitigation has been brought under the general concept of patient safety. As defined by the World Health Organization's (WHO) Patient Safety programme, "Patient safety is the absence of preventable harm to a patient during the process of health care." (WHO website). This risk of harm relates to the performance of the individual providing medical care, and can involve a variety of medical errors, such as misdiagnosis, drug dosage errors, incorrect decision to treat, and provision of services such as patient interaction and patient handover that does not meet the required standard of care.⁹ It should be emphasized here that the *risk* of harm entailed by a medical error does not mean a patient was actually harmed.

For paramedic practice, the unique environment in which services are delivered can again contribute to the impairment of patient safety. As the Canadian Patient Safety Institute (CPSI) pointed out in its 2008 report,

Emergency medical services (EMS) personnel often work in small, poorly lit spaces in environments that are chaotic, unfriendly and challenging for emergent or urgent healthcare interventions; indeed, it is often the dangerous nature of the environment that has led to the call for help. Unlike a hospital, emergency scenes are often loud, cluttered, and

⁹ Sohn further distinguishes between negligence, the "failure to meet a standard level of care" as a result of a "decisional error" and what he terms "system errors", i.e., "occasional, simple human error[s]" that happen "unintentionally" or "unwittingly", and thus cannot be deterred, but only safeguarded against. Evidence indicates that system errors constitute the majority of medical errors (Sohn, 2013, p. 50; see also Bigham et al., 2012, p. 6). Both decisional and system errors should also be distinguished from *intentional* acts of harm.

unfamiliar places to pre-hospital care providers. In addition to these challenging environmental factors, emotional stressors are often heightened by the presence of panicked family members, curious bystanders and a lack of human and medical resources (p. 4).

Another factor unique to paramedic practice is the transportation function. Not only do patients have to be physically relocated from the place of incident to the ambulance, the same paramedics providing prehospital care are also responsible for transporting the patient to the nearest or most appropriate medical facility in all weather and road conditions, often under severe time pressures, and conducting ongoing patient monitoring and assessment as they do so. This can and does result in accidents that are harmful to patient, paramedics and bystanders alike. (CPSI, 2008, p. 7). Fatigue and stressful working conditions (e.g., managing multiple trauma scenes) can also contribute to the risk of harm to patients, as can the need to make clinical decisions under severe time constraints and often with limited information (Brice et al., 2012; Lu, Guenther, Wesley and Gallagher, 2013). Finally, the widening paramedic scope of practice seen in recent years also gives rise to greater risk of harm, as paramedics now deliver more complex treatments and administer a wider range of drugs, training for which may not always have kept pace (Bigham et al., 2012; Atack & Maher, 2010).

Despite the evident risk of harm in paramedic practice, there are relatively few studies on this issue. The CPSI study states that "Patient safety in the EMS setting has been poorly studied; there is a paucity of evidence, and very few experimental trials of interventions designed to make EMS safer" (CPSI, 2008, p. 3), and goes on to point out that "In contrast to hospital settings, there is a stunning lack of epidemiologic data pertaining to adverse events in the prehospital setting..." (p. 4). An article resulting from this study notes that "Despite its nature, EMS is seldom discussed in the patient safety literature" (Bigham et al., 2012, p. 21). The absence of a strong research base was also noted by the Emergency Medical Services Chiefs of Canada (EMSCC) in its 2006 report (pp. 14-15).¹⁰ This lack of evidence is likely due to the fact that paramedicine has only relatively recently come to be seen as more strongly aligned with health care rather than primarily as a public safety service.

Key informants in the CPSI study identified "clinical judgment and the training required to make coherent decisions" as "the greatest risk to public safety" (2008, p. 3), rather than medication errors, poor driving skills, or any other substandard provision of paramedic services (see also Jensen, 2010, 2011a; Atack & Maher, 2010) (although another study found that, for out-of-hospital pediatric patients, "Medications... were frequently administered outside of the proper dose range" (Hoyle, Davis, Putman, Trytko, & Fales, 2012, p. 59)). The other patient safety themes identified by the CPSI study's systematic literature review were field intubation, air operations safety and interfacility transportation, meaning that many patient safety issues are not well represented in the literature (2008, p. 1). The World Health Organization's World Alliance for Patient Safety has developed a classification of 13 types of incidents that can lead to adverse events for patients, only three of which (clinical

¹⁰ For further discussion, see "Body of Knowledge and Scope of Practice".

process/procedures, medication and, arguably, infrastructure) appear in the literature surveyed by CPSI (World Health Organization, 2009, p. 32).

Lemonick's (2009) review of the literature regarding prehospital care concluded that "many of the current practices and protocols in EMS are not based on any level of scientific evidence" (p. 5). Along with incidents related to both air and land emergency response vehicles, this review discusses prehospital analgesia, EMS airway management, and CPR and advanced cardiac life support. He noted that "pain management in EMS continues to be woefully inadequate" (p. 9), that endotracheal intubation (ETI) was problematic (pp. 10-11), often leading to worse mortality, neurological and functional outcomes, and that ALS for cardiac arrest shows no significant benefits (pp. 12-13). However, such issues are at the systemic level, since they refer to standard paramedic prehospital practices, rather than due to a lack of competency on the part of practitioners. As will be discussed below, the OPALS study referred to by Lemonick showed precisely this systemic error with regard to the lack of apparent benefits of ALS in the case of cardiac arrest.

Other studies on systemic harm include that of Wang, Lave, Sirio and Yealy (2006), which examined the rate of ETI errors among EMS practitioners and concluded that "In the spirit of 'first, do no harm', we might consider not intubating at all" (p. 507), and of Lossius, Røislien and Lockey (2012), which concluded that non-physicians perform worse than physicians in prehospital ETI, a complex procedure and invasive act that can lead to later health complications if performed incorrectly.

Risk to Public Safety from Lack of Regulation of "Unlicensed" Paramedics

"Licensed" paramedics in Ontario are not unregulated, but are regulated under the *Ambulance Act*, precisely because the medical care they provide poses a risk of harm to patients. "Unlicensed" paramedics are not allowed by the Act to perform controlled acts, since they are not supervised by the medical director of a Base Hospital Program. However, it may be the case that these practitioners do perform such acts under delegation from a non-Base Hospital Program physician. Although this would seem to violate O. Reg. 257/00, it is in fact permitted under the *RHPA* and the *Medicine Act*.

The OPA does not have access to data that show the extent to which public safety is at risk because "unlicensed" paramedics remain unregulated. However, the level of concern expressed in 2011 by the Ontario Ombudsman at the lack of regulation of non-emergency medical transportation services and its impact on patient safety provides some evidence on this issue. The Ombudsman's office indicated that it had received complaints about "inadequate equipment, lack of infection control, poorly maintained vehicles and insufficient training of staff" (Ontario Ombudsman, 2012).

HPRAC's jurisprudence review of English language case law in Canada resulted in a total of 42 cases, 22 of which involved the issue of competence. Only in five of these cases was it established that the paramedic(s) involved had not provided the appropriate standard of care (HPRAC, October 2012).

The Rate and Nature of Complaints of Harm

The OPA has no jurisdiction to receive or act on complaints, which is the joint and several responsibility of the MOHLTC EHSB and, through performance agreements, EMS and Base Hospital Programs. The data in Table 1 on frequency of investigations and source of complaints were provided by MOHLTC EHSB. However, no indication was provided as to what extent these complaints involved adverse events, system errors or negligence. It is notable that over a period of nearly six years, the MOHLTC EHSB conducted only one investigation into an issue of paramedic competency.

Investigation Type	Number of Paramedics Investigated 2007-2012					
	2007	2008	2009	2010	2011	2012 (Jan-Nov)
Quality of patient care	54	79	67	153	198	74
Possible Ambulance Act contravention	7	17	8	14	7	5
Coroner investigation				10		
Possible Criminal Code contravention	2		2	10	5	
Paramedic competency				1		
Total	63	96	77	188	210	79

Table 1. MOHLTC EHSB Data on Investigations, 2007-2012

In its communication with the OPA, the MOHLTC EHSB noted that "Recommendations and actions taken can include: Paramedic Remedial, Ambulance Act Charges, Service review of paramedic qualifications, Paramedic rewrite, Dismissal, Suspension w/o pay, Criminal Code Charges and Discipline". Table 2 shows data relating to the outcome of MOHLTC EHSB's investigations:

Year	# of Recommended Paramedic Rewrites
2008	3
2007	2
2010	2

Table 2. MOHLTC EHSB Paramedic Rewrite Information

The Auditor General of Ontario's 2005 Annual Report suggests that the number of complaints received by EMS may be much larger than that received by MOHLTC EHSB, stating that "one municipality reported receiving about 300 complaints in 2004" (p. 58). However, two Ontario EMS suggest that they receive relatively few complaints

(M. Nolan, personal communication, February 21, 2013; N. Gale, personal communication, March 12, 2013). Base Hospital Programs are perhaps the primary body responsible for receiving and investigating complaints to do with the performance of controlled acts, but were unable to provide the OPA with this information.

There are no voluntary disciplinary or investigations processes that apply to "licensed" paramedics working for EMS in Ontario. Although Base Hospital Program quality assurance involves self-report on the part of these paramedics, this procedure is mandatory, not voluntary. The OPA has no knowledge about processes that may apply to "unlicensed" paramedics working for private non-emergency medical transportation and event medical services companies.

Anticipated Effect of Regulation under the RHPA on the Current Risk of Harm

Self-regulation within a College of Paramedics under the *RHPA* would increase transparency, public accountability and competency within the profession, would include all paramedics, and would allow for greater interprofessional collaboration to determine standards and best practices in assessments, the use of diagnostic modalities, clinical treatment and patient care. This would reduce the risk of harm to patients from its current level, particularly with regard to individuals employed by private companies offering medical transportation and event medical services, who will be brought under a regulatory umbrella from which they are currently excluded. In addition, the increased transparency and public accountability resulting from self-regulation under the *RHPA* will further reduce the risk of harm presented by paramedic practice, in part by necessitating that paramedics take responsibility for maintaining the levels of competence required by their standards of practice and for their professional development. Since paramedics are in the best position to understand their training, continuing competency and professional development needs, regulation under the *RHPA* would allow their expertise to be harnessed to better protect the public interest.

Mechanisms in Place to Ensure the Delivery of Safe Care by Paramedics

"Licensed" paramedics in Ontario are supervised by a regulated health professional, namely, the medical director of the responsible Base Hospital Program. Statutory regulation under the *Ambulance Act* imposes a number of mechanisms to ensure delivery of safe care and quality of work performance. These include: education and certification requirements; continuing medical education (CME) and annual recertification requirements supervised by Base Hospital Programs through a performance agreement with the MOHLTC EHSB; and conduct and other operational requirements supervised by EMS. In addition, as discussed above, MOHLTC EHSB, Base Hospital Programs and EMS all conduct investigations of complaints. Paramedics found to have performed below required standards of practice by Base Hospital Programs may be asked to take remedial training, be temporarily deactivated, or even be decertified entirely. Figure 1 shows the current regulatory system and the mechanisms to ensure delivery of safe care it involves.

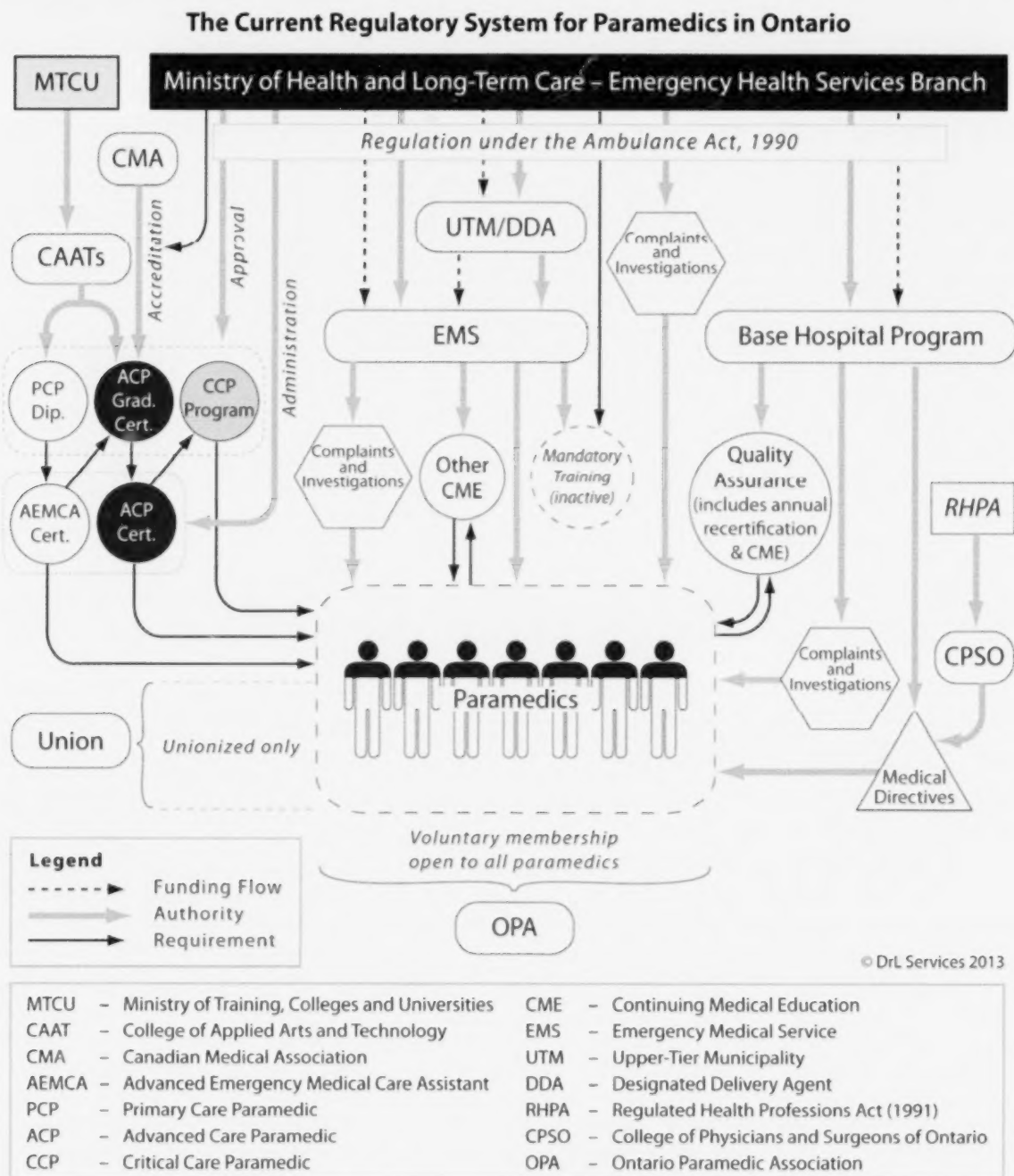


Figure 1. Diagram of the Current Regulatory System for Paramedics in Ontario

Supervision

The out-of-hospital environment in which "licensed" paramedics primarily deliver their services entails that these practitioners perform their duties without direct supervision, save when they are required to patch to a Base Hospital Program physician. Such

paramedics perform patient assessments and diagnoses, administer interventions and treatments to stabilize patients, and transport patients to medical facilities, in most cases, for further care under the indirect supervision of the medical director of a Base Hospital Program through medical directives and standing orders. As a result, paramedics require a wide range of skill and knowledge, both in terms of patients (neonatal to geriatric) and of the symptoms and conditions that may be encountered. The nature of emergency triage at the scene of medical trauma depends heavily on the clinical judgment and experience of each paramedic.

Typically, "licensed" paramedics work in teams of two, except during land transport, when one monitors and treats the patient as the other drives. In situations where a PCP with appropriate competencies is paired with an ACP, the latter may provide supervision to the former, for example in directing the PCP to initiate cannulation of a peripheral IV.¹¹ The relationship between PCPs and ACPs is usually one of collaboration whereby the responsibility for patient care is shared, recognizing that given their different scopes of practice, the ACP may assume a leadership role.

Contribution of Advances in Technology and Treatment to Risk of Harm

Paramedic scopes of practice have evolved rapidly just over the past twenty years and will continue to evolve in tandem with advances in emergency medicine. Advances in treatment and technology can contribute to potential risks of harm posed by paramedics in two respects. On the one hand, if such advances are not incorporated into paramedic practice in a timely way, procedures with a greater risk of harm may continue to be used, thereby meaning that such practice would fail to meet the highest standards of patient care. Yet incorporating such advances is complicated under the current regulatory system, since this would most likely require revision to medical directives and/or standing orders, which can be a time-consuming process (HPRAC, 2008a, p. 2).

Second, if such advances are incorporated into paramedic practice without sufficient training, performance at the required level may not be achieved, which has the potential to exacerbate the risk of harm to patients rather than reduce it. For example, paramedics are expected to be able to identify electrocardiographic changes consistent with an acute myocardial infarction and to be able to identify those patients who should be transported directly to a percutaneous coronary intervention center. Failure to correctly identify these patients is known to result in poorer outcomes. Patients in acute pulmonary edema or experiencing an acute exacerbation of chronic obstructive pulmonary disease (COPD) are now routinely managed with continuous positive airway pressure (CPAP) by ACPs and some PCPs. However, CPAP can have deleterious effects if not clinically indicated or outright contraindicated. Nevertheless, when protocols have been changed as with STEMI and Stroke Bypass, potential risks of harm have been reduced (Postma et al., 2011; Fosbøl et al., 2013; Cantor et al., 2012).

¹¹ However, this protocol is under revision.

Liability/Insurance Protection

Liability/insurance protection is currently provided by the municipal EMS that employs the paramedic. Because "licensed" paramedics do not operate as independent practitioners, as is the case for some other health professions regulated under the *RHPA* (e.g., midwives and physiotherapists), there has been no requirement for them to obtain liability insurance coverage on an individual basis. And because such paramedics are at present regulated under the *Ambulance Act* rather than the *RHPA*, there is no current statutory requirement that individuals be covered by liability insurance. It is anticipated that the current provision of liability protection by EMS would remain with self-regulation of paramedics under the *RHPA*. Some private companies providing medical transportation and event medical services that employ "unlicensed" paramedics already provide liability protection to the levels required by the 2009 amendment to the *RHPA*.

Processes Undertaken to Determine Public Need for Regulation

The OPA has not undertaken any processes to determine the public need for regulation, since it views the current regulation of "licensed" paramedics under the *Ambulance Act* as evidence of the public need for regulation (although this may not be widely understood by the public). With respect to "unlicensed" paramedics, the fact that they are unregulated in Ontario has been an ongoing issue of concern, particularly in the context of non-emergency patient transportation services (LATT, 1998, p. 4; Ontario Ombudsman, 2012).

Professional Titles

The *Ambulance Act* does not restrict use of the titles of "paramedic", "Primary Care Paramedic", "Advanced Care Paramedic" and "Critical Care Paramedic". It simply defines "paramedic" to mean

a person employed by...an ambulance service who meets the qualifications for an emergency medical attendant as set out in the regulations, and who is authorized to perform one or more controlled medical acts under the authority of a base hospital medical director... (*Ambulance Act*, 1991, s. 1(1)).

Ontario Regulation 257/00 ss. 7-8 sets out further requirements for paramedics at the three levels, including educational requirements and, in each case, the specification that the individual "be authorized by a medical director of a base hospital program to perform the controlled acts set out" in the relevant Schedule (Schedule 1 for PCPs, Schedule 2 for ACPs, and Schedule 3 for CCPs).

The *Ambulance Act* does not delimit the authorization of controlled acts by a medical director of a Base Hospital Program or the "provision of continuing medical education required to maintain the delegation of controlled acts to paramedics" only to paramedics employed by EMS (or "ambulance services"), but does define a Base Hospital Program as having the purpose of "providing medical advice relating to pre-hospital patient care

and transportation of patients to ambulance...services" and "providing quality assurance information and advice relating to pre-hospital patient care to ambulance services..." Therefore, the authorization (or "delegation") of controlled acts and provision of continuing medical education to such paramedics is *implicitly* delimited to "licensed" paramedics. Thus, there is a restriction of the title "paramedic" in the context of the Act, but not outside of that context.

To ensure continuity in protection of the public interest, the OPA recommends that the titles of "Primary Care Paramedic", "Advanced Care Paramedic" and "Critical Care Paramedic" be restricted to practitioners who meet the respective entry-to-practice requirements and are registered members in good standing of the College of Paramedics. This will serve to protect the public interest by ensuring the identification of qualified, competent practitioners and the prohibition against unqualified individuals acting in such capacities.

Circumstances requiring Referral to another Health Profession

While paramedics do not typically refer patients in the way that, for example, physicians do, they are required to make decisions based on patient assessment with respect to the most appropriate medical facility (e.g., with STEMI and Stroke Bypass) to which to transport the patient. In recent years, however Community Paramedic Programs involving a service called "Community Referrals by Emergency Medical Services" (CREMS) have been implemented by several EMS in Ontario (Evashkevich, n.d.). The intention of this service is to "link low acuity EMS patients to services other than the hospital emergency department, and that are better suited to meet the underlying needs of the patient" (Hamilton EMS, 2011). Because a large number of paramedic calls involve visits to patients' homes (Weiss, Ernst, Phillips & Hill, 2001; NEMSIS, 2013), paramedics have the unique opportunity to observe the patient's home context, to identify risks patients face, and to identify any need for additional healthcare support, such as physiotherapy or nursing visits.

Professional Autonomy

Autonomous Practice

In the out-of-hospital context, "licensed" paramedics conduct patient assessments and perform diagnostic modalities and controlled medical acts autonomously, with reference to general guidelines as to patient care standards (BLS) and advanced life support medical directives, but relying on their clinical judgment for specific performance. In certain cases, such as Stroke Bypass, protocols give paramedics greater autonomy in determining the most suitable medical facility to which to transport a patient.

Higher-level paramedics (i.e., ACP and CCP) are able to assess and perform diagnostic modalities and treatments for a wider range of patient conditions and symptoms. However the lower the level of care, the greater the autonomy. For example, PCPs deliver care entirely under standing orders, as is the case for almost all of the care that ACPs deliver. Only a small percentage of the care delivered by ACPs involves obtaining

a verbal order by patching to a Base Hospital Program physician, although in the event of a communication failure the ACP can provide care within their scope if they deem it to be in the best interest of the patient. CCPs provide the highest level of complex care and are routinely in contact with a Base Hospital physician for consultation and verbal orders as needed.

Accountability

Arguably, "licensed" paramedics are held equally accountable for all aspects of their practice, whether clinical, operational or conduct. Each of these is subject to some sort of complaint and investigations procedure, whether by MOHLTC EHSB, EMS or the Base Hospital Programs. However, there is less transparency with respect to some aspects of paramedic practice, and therefore less *public* accountability. As well, "unlicensed" paramedics are not accountable in the same way, an issue that was one of the subjects of the Ontario Ombudsman's investigation into non-emergency medical transportation services in 2011 (Ontario Ombudsman website).

Under the current regulatory system, "licensed" paramedics are highly regulated. For example, EHSB investigates complaints of a BLS nature and can decertify paramedics of any level by revoking their A-EMCA certificate. Base Hospital Programs perform clinical audits by reviewing, up to 100% of Ambulance Call Reports (required when controlled acts are performed). Paramedics are required to self-report to their Base Hospital any incidents in which they believe they have acted below the required standards of care (BLS and ALS), and may be subject to investigations by the Base Hospital Program, which can result in deactivation (temporary suspension) or even decertification. As well, these practitioners must undertake a set number of hours of continuing medical education and undergo recertification annually. However, these measures are typically less open to public scrutiny than has come to be expected in the evolution of Ontario's regulatory system for health care.

Self-regulation under a College of Paramedics would increase transparency and public accountability, through public involvement in the regulatory process, through the statutory requirement that a College engage in public outreach, and through the visibility of, and public access to, the complaints and disciplinary process.

Performance of Controlled Acts under Delegation

Under the *RHPA*, regulated health care professionals can delegate any of their controlled acts without restriction. The recipient of such delegation may or may not be a member of the regulated profession. A College can set conditions, limitations or restrictions, or can prohibit their members both from delegating and receiving delegations. Once a controlled act has been delegated, the member delegating the act remains responsible and is accountable to the patient. This member has an ongoing duty to supervise (HPRAC, 2006, p. 284).

The issue of the conditions regulating "licensed" paramedics' performance of controlled acts has been ongoing, not because of concern regarding the level of competence in the performance of such acts, but rather because, under the current regulatory system, paramedics can only perform them under a form of delegation from the medical director of a Base Hospital Program. The approximately 7,000 "licensed" paramedics in Ontario are granted statutory authority to perform up to seven controlled acts, depending on their level, under the authorization of a medical director of a Base Hospital Program, who is ultimately responsible for their performance of such acts. This system is neither effective nor sufficiently transparent, since the authority and responsibility for controlled acts performed by "licensed" paramedics rests in the hands of one physician, who has sole authority to deactivate or decertify them, a state of affairs that involves too much responsibility and authority for one physician and fails to provide paramedics with a fair peer review system of performance evaluation.

Authorization of controlled acts (of which diagnosis is one under the *RHPA*) is somewhat unclear under the *Ambulance Act*, since the lists of controlled acts that may be performed by an Advanced Care Paramedic (Schedule 2) and a Critical Care Paramedic (Schedule 3) are also allowed to be performed, "if authorized", by a Primary Care Paramedic (Schedule 2) and an Advanced Care Paramedic (Schedule 3), respectively. The issue here, as elsewhere, is what "authorization" means beyond the authorization already specified in the *O. Reg. 257/00*, which sets out the educational, MOHLTC certification, and employment/Base Hospital Program oversight requirements for the different levels of paramedics. Unfortunately, neither the *Act* nor the *Regulation* defines "authorization", which thus provides a less clear distinction between paramedic levels than is desirable.

In terms of controlled acts, *O. Reg. 257/00* muddies the distinction between PCP and ACP on the one hand, and ACP and CCP on the other. In this regard, it should be noted that the *Ambulance Act* and its Regulations are unclear about the authorization of controlled acts in general. First, there is a significant inconsistency with the way controlled acts for paramedics are specified in the *RHPA* and the *Acts* governing health professions regulated under the *RHPA*, which refer to them only in general terms (e.g., "performing a procedure on tissue below the dermis", "administering a substance by injection or inhalation", etc.), whereas *O. Reg. 257/00* refers to *specific* acts (e.g., "peripheral intravenous therapy", "administration of glucagon, oral glucose..."). These are obviously not consonant, despite the fact that the latter fall under the more general categories specified in the *RHPA*.

Second, there are obvious gaps in the *Ambulance Act*, since nowhere does the *O. Reg. 257/00* allow for communicating a diagnosis, setting a splint or managing labour, yet "licensed" paramedics are often required to perform such acts.¹² Third, and perhaps most important, the concept of delegation under the current regulatory system for paramedics is at odds with the way delegated acts are understood in the Ontario system, even by the College of Physicians and Surgeons of Ontario, which, as the self-

¹² Arguably, "licensed" paramedics are *always* required to inform patients or their relatives/caregivers of the results of assessments and diagnostic tests, in order to obtain patient consent.

regulatory body for medical directors of Base Hospitals (who are physicians), has a clear policy regarding delegation. Essentially, delegation can only occur where the delegating authority has the authority to perform a controlled act, and delegates it to an individual *who does not have that authority*. A controlled act cannot be delegated to someone who already has the authority under his or her scope of practice (no delegation needed, or accepted, since the individual can perform the act under his or her own license), nor can it be delegated by someone to whom such an act is already delegated (i.e., no sub-delegation).¹³

For "licensed" paramedics, on the one hand, the *Ambulance Act*, 1990 and *O. Reg. 257/00* indicate that the controlled acts that each level of "licensed" paramedic may perform already fall within their scope of practice, since the extension of controlled acts to lower levels of paramedics in the Schedules (Schedule 2 acts to PCPs, Schedule 3 acts to ACPs) depends on "authorization" that would seem to differ from that set out in the Regulation proper (i.e., ss. 8(1)(b), 8(2)(c) and 8(3)(c)). In other words, medical directors appear to authorize PCP and ACP to perform acts not just based on their level and competency at that level, but on other factors as well. This makes the distinction between the qualifications of the various levels in *O. Reg. 257/00* unclear, since the controlled acts can be authorized to those who do not appear to have the requirements that the Regulation itself sets out.

A further consideration is that this model of delegation (or, more properly, "authorization") relies on criteria specified only in the performance agreements between the MOHLTC and Base Hospital Programs on the one hand, and between EMS and Base Hospital Programs on the other, neither of which are publicly available, meaning that the criteria for regulation are not transparent. There is therefore a lack of public accountability. Again, this is in contrast to professions regulated under the *RHPA*, for which Colleges are required to make the Bylaws that govern such aspects publicly available. Arguably, it is not in the public interest for a health profession whose practices entail significant risk of harm to have its standards and criteria for performing controlled acts kept out of public view. As HPRAC has argued regarding the performance of controlled acts that are a routine part of a health care professional's practice,

¹³ For some regulated health professions (e.g., RNs), the initiation of certain controlled acts that are within their scope of practice requires an *order* or *directive* (e.g., from a physician or NP). This is not considered to be delegation, however. The lack of clarity in the *Ambulance Act* lies in the way it authorizes paramedics to perform controlled acts under the authorization of a medical director of a Base Hospital Program. In other words, the Act specifies paramedics' scope of practice in terms of controlled acts, while at the same time implicitly denying that the performance of the indicated controlled acts falls within paramedics' scope of practice because they require authorization. Thus, it is not clear whether medical directors of Base Hospital Programs are delegating the performance of controlled acts to paramedics, or are ordering them through directives. If the latter obtains, this is not delegation at all, since a necessary aspect of delegation of a controlled act is that it does not fall within the scope of practice of the profession to which the act is being delegated. The conditions placed on delegation pertain to the delegator's ascertainment of the delegatee's competence to perform the particular act, rather than any statutory authorization that the delegatee can accept such delegation, which would in fact be incoherent. (Note that this is different from a *prohibition* against accepting delegation, as contained in some Regulations and College Bylaws under the *RHPA*.) Yet this appears to be exactly what the *Ambulance Act* aims to do.

performing this function under one's own professional authority and accountability is preferable to delegation from another authorized health professional. It is also more transparent to the public and to other members of a collaborative health team providing patient care (2009, p. 153).

The profession of paramedicine has undergone significant evolution over the past two decades. The educational and training requirements for paramedics have increased substantially both in content and length, and have made it possible for controlled acts to come within paramedics' scopes of practice, albeit in a way that is no longer consonant with the Ontario regulatory system for health care, which has continued to evolve over the past two decades. Furthermore, the paramedic scope of practice has grown, as has the number and complexity of the transfers of function and controlled acts authorized by medical directors of Base Hospital Programs. On the other hand, paramedics are better educated and more aligned in the health care system than twenty years ago when the current process for authorization of controlled acts was enacted. It is unrealistic to expect the physician population to assume full responsibility for transfers of function currently practiced by paramedics.

As well, the ability for a medical director to meet the requirements set out in the regulations with respect to transfers of function is becoming increasingly difficult as the number of paramedics practicing under his/her medical license increases. The OPA's view is that it is unrealistic to expect this form of oversight to adequately protect the public and, in the circumstances, more responsibility ought to be shifted directly to the individual paramedic license holder, who would be subject to regulation by a College of Paramedics.

Educational Requirements for Entry to Practice

Programs Available in Ontario

Paramedic education in Ontario is the shared responsibility of two Ministries: MOHLTC and MTCU. MOHLTC is responsible for setting the skills required to qualify for registration as a PCP, ACP and CCP, for the credentialing program (e.g., administering the Advanced Emergency Medical Care Assistants (A-EMCA) and ACP exams, and for the Paramedic Equivalency Process for paramedics from other jurisdictions wishing to register in Ontario (MOHLTC EHSB website). As discussed above (see p. 2), MOHLTC regulates municipally delivered paramedic services in Ontario under the authority of the *Ambulance Act* and its regulations. *O. Reg. 257/00* Part III (in particular, ss. 7-8) sets out the qualifications that paramedics require.

MTCU, on the other hand, is responsible for setting the standards for paramedic programs delivered by Ontario Colleges of Applied Arts and Technology (CAATs) that lead to college diplomas. Graduates of such programs are eligible to write the MOHLTC A-EMCA certification examination (MTCU, 2008, p. 5). However, MOHLTC approves the list of programs provided by colleges and institutions, which also includes three

private career colleges that come under the authority of the Superintendent of Private Career Colleges and two non-educational institutions (Toronto EMS and Ornge), along with 18 of the 24 CAATS. Two colleges (Boréal and La Cité) deliver programs in French. Ontario has no paramedic programs that are not approved by MOHLTC. A notable difference between the standard-setting of the two Ministries is that MOHLTC is primarily concerned with *vocational standards*, whereas MTCU is also concerned with *essential employability skills* and *general education requirements*.

All paramedic education programs in Ontario include both theoretical and clinical/field components. The MOHLTC EHSB requires that PCP programs in Ontario include the following components: (i) a theory component of 800+ hours; (ii) a practical lab and hospital clinical component (300 hours); and (iii) a land ambulance field placement component (minimum 450 hours) (MOHLTC EHSB website). PCP educational programs in Ontario are two-year diploma programs that include courses in the following areas: Anatomy and Physiology; Psychopathology/Crisis Intervention; Pharmacology; Health Care Communication; Medico-Legal Aspects; Physical Education; Patient Care Laboratory; Patient Care Theory; Emergency Medicine; Emergency Vehicle Operation; Medical Directives; Clinical Practicum; and Field Practicum. These areas are the basis of MOHLTC EHSB's *Prehospital Emergency Care Syllabus* and constitute "the theory base and the performance skills from which Paramedic candidates will be evaluated" for the A-EMCA (MOHLTC EHSB, 2000, p. 1.1). Figure 2 shows how they form a unified approach to patient management.



Figure 2 MOHLTC EHSB's PCP Patient Management Model (Source: MOHLTC, 2000, p. 1.5)

The competencies that ACP programs are required by MOHLTC EHSB to include are:

1. Weekly student evaluation completed by a clinical supervisor. This should identify learning issues and show student progression.
2. Minimum 20 successful human intubations (signed off by anesthesia or equivalent). In addition, 2–5 pediatric airway management cases (+/- intubation).
3. Minimum 20 ED patient assessments reviewed by the clinical supervisor.
4. Minimum 20 complete patient charts (consistent with field or hospital practice).
5. Minimum 20 successful IV starts.
6. Completion of a daily journal (completed by the student).
7. Completion of a daily clinical skills tracking log.
8. Student feedback on clinical rotation (MOHLTC EHSB website).

ACP programs in Ontario are one-year graduate certificate programs that include courses in the following areas: Advanced Pharmacology; Advanced Care Skills (Cardiac, Airway Management, Respiratory, Medical Emergencies, Trauma); Professional Practice; Skills Practicum; Hospital Practicum; and ACP Ambulance Practicum.

Ornge's CCP program is a one-year program that includes courses in the following areas: Professional Practice; Fundamentals of Critical Care; Therapeutics and Diagnostics; Emergencies (Pulmonary, Cardiovascular and Hematological, Genitourinary and Reproductive, Gastrointestinal and Endocrine, Obstetrical, Traumatic and Toxicological, Neurovascular, Immunological and Environmental, Neonatal); Paediatrics; Preceptorship (Ornge, n.d.).

In addition to these programs, the MOHLTC also certifies paramedics to work on air ambulances as Flight Paramedics at each of the three levels. Training for this designation is offered by Ornge, followed by a MOHLTC-administered Aeromedical Theory Certification Examination that assesses the applicant's knowledge and skills in anatomy, physiology and pathophysiology, emergency procedures (aircraft and survival), flight operations, flight pathophysiology and legal issues (MOHLTC EHSB website).

Table 3 shows data provided by MOHLTC EHSB indicating that over the last five years, 93.5 to 98 percent of all those who successfully completed the MOHLTC EHSB's examinations for certification at the AEMCA and ACP levels (between 859 and 950 applicants) were educated in Ontario. There were very few international applicants at the PCP level, and none at the ACP level. Although these numbers are not determinative of the educational origin of paramedics in Ontario currently employed by EMS (since the rate at which such qualified individuals are entering the workforce far exceeds the growth rate in EMS employment and, it is hypothesized, the attrition rate), they are arguably a reasonable indicator of such an origin.

Origin of Education	2008	2009	2010	2011	2012	Total 2008-2012
PCP Ontario	98.5%	98.2%	95.0%	93.6%	94.0%	
PCP Other Canada	0.7%	1.2%	4.3%	4.9%	5.3%	
PCP International	0.8%	0.5%	0.8%	1.5%	0.8%	
Total PCP	732	740	797	813	799	3881
ACP Ontario	95.3%	95.1%	88.3%	92.8%	93.4%	
ACP Other Canada	4.7%	4.9%	11.7%	7.2%	6.6%	
ACP International	0.0%	0.0%	0.0%	0.0%	0.0%	
Total ACP	127	144	137	139	151	698
PCP + ACP Ontario	98.0%	97.7%	94.0%	93.5%	93.9%	
PCP + ACP Other Canada	1.3%	1.8%	5.4%	5.3%	5.5%	
PCP + ACP International	0.7%	0.5%	0.6%	1.3%	0.6%	

Table 3. Percentage of successful completions of MOHLTC EHSB AEMCA and ACP exams by place of education (Source: MOHLTC EHSB)

The OPA does not maintain statistics on the education and training of its members.

Accreditation of Programs

All of the CAAT programs listed on the MOHLTC EHSB website are approved by the Ministry. There are no known paramedic programs in Ontario that are unapproved. There is no accreditation requirement for CAAT programs, although these must conform to MTCU program standards. Private career colleges must be registered and have their programs approved by the MTCU's Superintendent of Private Career Colleges. As well, seven of the institutions offering PCP programs (i.e., 38%) and all 11 of those currently offering ACP Programs (i.e., 100%) are accredited by the CMA through its Conjoint Accreditation Program, the latter a MOHLTC EHSB requirement.¹⁴ Four institutions offering PCP programs are registered with the CMA for eventual accreditation. The only institution in Ontario offering CCP education (Ornge) is approved by MOHLTC EHSB and accredited by the CMA. The CMA's accreditation for paramedic training programs draws on the NOCP for its criteria, thereby facilitating inter-jurisdictional recognition of paramedic qualifications (CMA, 2008, p. 3; CMA, September 2012; CMA, December 2012). However, Ontario's current paramedic standards are not entirely consonant with the NOCP, particularly since the latter introduced a new competency area ("Health Promotion and Public Safety") (NOCP, pp. 147-151).

¹⁴ Although St. Clair College is listed on the MOHLTC EHSB website as an approved ACP program provider, it does not appear to currently offer this program, nor is it CMA-accredited.

In 2001, the Paramedic Association of Canada (PAC) developed the NOCP, defining the competencies required for entry to practice. The NOCP also serves to define the profession, promote national consistency in paramedic training and practice, and to facilitate labour mobility for practitioners. In November 2011, an updated NOCP was approved by PAC and adopted by the Canadian Organization of Paramedic Regulators (COPR), which comprises the self-regulating colleges and government or government-delegated regulators from each of the ten provinces, as a foundation document in the development of a national entry to practice examination for paramedics. COPR has also used the NOCP competencies as a basis for jurisdictional comparison in its work on labour mobility for the profession.

Each provincial paramedic regulator in Canada outlines the educational requirements for entry to practice in its jurisdiction. The CMA currently accredits 68 paramedicine education programs in the country based on the NOCP. The CMA requires programs to cross-reference all NOCP competencies to their program elements, including proof of didactic, simulation, clinical rotation and field preceptorship. Most Canadian paramedic education programs are now based on the NOCP, but not all are required to have CMA accreditation. Paramedic education programs exist in both the public and for-profit environment, although the majority of programs are now housed in college or technical school settings.

Program length for PCP education ranges from four months at the Justice Institute in British Columbia to two years in Ontario college settings and three years in Quebec. ACP education is taught in both public and employer settings across the country. CCP education is available only in a limited number of settings.

Requirements for Academic Credentials

Membership in the OPA is open to paramedics, paramedic students, and affiliate members. No academic credentials *per se* are required for membership, but the class of membership in effect depends on having satisfied educational requirements (e.g., for paramedics, having graduated from a college paramedic program).

Under the *Ambulance Act*, the Minister of Health and Long-Term Care is granted the power to make regulations "prescribing the qualifications of persons employed in ambulance services...and respecting the testing and examination, physical or otherwise, of such persons and their duties and obligations" (*Ambulance Act*, s. 22(1)(d)). *O. Reg. 257/00* further specifies the following in order to be employed by Ontario EMS (or "ambulance service operators"):

An emergency medical care assistant shall, before January 1, 2002...have successfully completed an ambulance and emergency care program provided by a College of Applied Arts and Technology or have experience and qualifications that are approved as equivalent by the Director...(O. Reg. 257/00 s. 7(3)(a))

An advanced emergency medical care assistant shall... have successfully completed an ambulance and emergency care program or a paramedic program provided by a College of Applied Arts and Technology or have experience and qualifications that are approved as equivalent by the Director... (O. Reg. 257/00 s. 7(4))

Qualification as an advanced emergency medical care assistant (AEMCA) is a prerequisite for designation as "paramedic".

There are no regulations governing "unlicensed" paramedics or companies that employ them, such as medical transportation and medical event services. Such companies therefore set their own requirements for academic credentials. Although they do employ "unlicensed" paramedics and, in some cases, "licensed" paramedics, they also employ individuals with First Responder certificates and other qualifications.

Other Jurisdictions

British Columbia's Ministry of Health Emergency Medical Assistants Licensing Board website states that individuals wishing to become paramedics "need to complete a training program recognized by the EMA Licensing Board and become certified before applying for your EMA licence or endorsement in B.C." (British Columbia Ministry of Health website). PCP, ACP and CCP programs must be accredited by CMA, but there are no *statutory* requirements for academic qualifications.

The Paramedic Academy at the Justice Institute of British Columbia is the sole provider of PCP and ACP education in the province. Its PCP course is an eight-month Certificate (one month independent online course, four months classroom component, three months availability for hospital and ambulance placements) comprising 669 hours. Prior completion of a 105-hour Emergency Medical Responder course or its equivalent is a prerequisite for enrollment. Its ACP Advance Diploma is a 20-month program comprising 1765 hours, 1040 of which involve clinical practice (Justice Institute of British Columbia website).

In Alberta, paramedics are in the process of regulatory transition, as they move from regulation under the *Health Disciplines Act* (HDA) and the *Emergency Medical Technicians Regulation* (Alberta Regulation 48/1993) (EMTR), with oversight by the Health Disciplines Board, to self-regulation under the *Health Professions Act* (HPA), with oversight provided by the Alberta College of Paramedics. The EMTR simply specifies that registration is open to an individual who "has successfully completed a program of study... that is approved by the Board" (EMTR s. 3(a)(i)). Applicants for EMT and EMT-P registration exams (corresponding to Ontario's AEMCA and ACP exams) must have successfully completed an approved educational program. (Alberta College of Paramedics website).

One institution offering approved programs is the Northern Alberta Institute of Technology (NAIT), which has both EMT and EMT-P programs. Successful completion of a 52-hour EMR course is a prerequisite for enrollment in the EMT program. The EMT

certificate program consists of 300 hours of EMT theory, 40 hours of hospital practicum, and 8 to 16 weeks of ambulance practicum. The EMT-P program includes 3 semesters of classroom education and 1364 hours of ambulance and hospital practicum.

In Saskatchewan, paramedics are regulated by the Saskatchewan College of Paramedics (SCoP) under the *Paramedics Act*. Educational requirements are specified in the SCoP's *Regulatory Bylaws* (SCoP, September 2012), which stipulate that a "person applying for initial registration as a member must...have successfully completed one of the following education programs": (i) "in the case of registration as an emergency medical technician (EMT) [corresponding to Ontario PCP], a Canadian Medical Association accredited emergency medical technician or primary care paramedic applied certificate program approved by council..." (s. 2(1)(c)(ii)); (ii) "in the case of registration as an emergency medical technician-advanced (EMT-A) [no Ontario equivalent], a Canadian Medical Association accredited emergency medical technician-advanced or intermediate care paramedic applied certificate program approved by council..." (s. 2(1)(c)(iii)); and (iii) "in the case of registration as an emergency medical technician-paramedic (EMT-P) [corresponding to Ontario ACP], a Canadian Medical Association accredited emergency medical technician-paramedic or advanced care paramedic diploma program approved by council..." (s. 2(1)(c)(iv)).

The SCoP website links to courses provided by the Saskatchewan Institute of Applied Science and Technology (SIAST) for CMA-accredited EMT certificate (now called "Primary Care Paramedic") and EMT-P (now called "Advanced Care Paramedic") diploma programs. SIAST's PCP certificate program is 28 weeks long and comprises 468 classroom hours and 338 clinical and field practicum hours. SIAST's ACP diploma program is 59 weeks long and comprises 712 classroom hours and 1016 clinical and field practicum hours (SIAST website.).

Varying Levels of Registration

An Ontario College of Paramedics will need three levels of registration, corresponding to the three levels of paramedics as at present and as detailed in the NOCP, i.e., PCP, ACP and CCP, since their scopes of practice differ.

Body of Knowledge and Scope of Practice

Paramedicine is positioned at the intersection of health care, public health, and public safety. Owing its existence to each, the Paramedic is cross-trained in each of these areas. As a result, a synergy occurs among the knowledge from these three areas and the result is paramedicine, a unique body of knowledge which is exclusive of its origins. (Beebe & Myers, 2010, p. 4)

The unique environment in which paramedic practice takes place (i.e., out-of-hospital), is reflected in the profession's core body of knowledge, which can be seen as a combination of medical and patient safety knowledge and skills. The wide range of patients, medical emergencies, and external conditions paramedics encounter on a

daily basis entails that their core body of knowledge is equally comprehensive. Nevertheless, it is also an integrated body of knowledge that extends from pre-call ambulance preparation; through call response, scene management, patient assessment and treatment; to patient movement, transportation and transfer of care.

As is evident from the MOHLTC EHSB website, paramedics' core body of knowledge thus includes:

- | | |
|---|--|
| i) anatomy and physiology, from neonatal to geriatric | xii) psychology/sociology; |
| ii) pathophysiology | xiii) supportive and therapeutic communications; |
| iii) disease and trauma processes | xiv) crisis intervention; |
| iv) diagnostic tests | xv) patient assessment and treatment; |
| v) emergency patient care | xvi) equipment safety and preparedness; |
| vi) airway management | xvii) professional collaboration; |
| vii) symptom relief | xviii) transportation factors; |
| viii) pharmacology | xix) driving skills; |
| ix) medication administration | xx) documentation procedures; |
| x) cardiac resuscitation | xxi) radio and other communications protocols |
| xi) legal and ethical issues | |

The breadth of the paramedic core body of knowledge is evident in competency profiles and reference manuals. For example, the NOCP outlines eight areas of competence:

1. Professional Responsibilities;
2. Communication;
3. Health and Safety;
4. Assessment and Diagnostics (including pathophysiology);
5. Therapeutics;
6. Integration (full assessment and treatment);
7. Transportation;
8. Health Promotion and Public Safety;

Within each competency area are a number of specific competencies, under which are further sub-competencies. Assessment and Diagnostics, for example, has 51 sub-competencies, Therapeutics has 67, and Integration has 25. And although not all levels of paramedics are expected to *perform* the procedures described by these subcompetencies, the NOCP considers only 7 of the 143 just mentioned to be "not applicable" to PCPs, with a further four requiring only a "basic awareness". For the remaining 132 subcompetencies, a PCP is expected to demonstrate at least "academic understanding", and in most cases to have demonstrated proficiency in either a simulated, clinical or field setting. The NOCP requirements for ACPs and CCPs are, of course, higher.

Overlaps with other Regulated Professions

Paramedics' body of knowledge overlaps with that of several regulated health professions, including nurses, midwives, respiratory therapists and physicians. For example, nurses' body of knowledge includes anatomy and physiology, pathophysiology, pharmacology, patient care skills, and therapeutic communication (College of Nurses of Ontario, 2008). Midwives have specialized knowledge of anatomy and physiology, pharmacology, and assessment, diagnostic and therapeutic modalities as these relate to pregnancy. (College of Midwives of Ontario, 1994). Respiratory therapists' body of knowledge includes patient respiratory assessments and diagnostic testing, pharmacology, airway management, and IV procedures (National Alliance of Respiratory Therapy Bodies, 2011). Finally, physicians' body of knowledge includes patient assessment, anatomy and physiology, pharmacology, diagnostic and therapeutic modalities (Royal College of Physicians and Surgeons of Canada, 2005).

Evidence-based Practice

Evidence-based medical practice is a relatively new approach, involving the examination of studies reporting on randomized controlled trials, meta-analysis and other high levels of evidence. Since recognition of paramedicine as a health care, rather than predominantly a public safety, profession is of relatively recent origin, there are fewer evidence-based studies relating to paramedic practice than to other health professions such as nurses and physicians. In 2001, the U.S. National Association of EMS Physicians (an organization whose membership includes paramedics), produced a national EMS research agenda, pointing out that

There is not enough high quality EMS-related research to drive improvements in patient outcome, and vast amounts of money are being spent for patient care with little rigorous evaluation of the effectiveness of that care (2001, p. 7).

A gap analysis conducted by the U.S. Emergency Medical Services for Children National Resource Centre concluded that "Evidence for treatments used in the prehospital setting is lacking" (2009, p. 6) and that

The research of prehospital care has failed to keep pace with the research of other medical disciplines. Consequently many practical procedures and interventions used to care for and stabilize out-of-hospital emergencies lack a scientific base (p. 8).

In Canada, Jensen et al. (2011b) have argued that "The challenge for many health disciplines, including emergency medical services (EMS), is the scarcity of research from which best evidence can be derived" (p. 1). This evidence gap has been recognized by organizations such as EMSCC, PAC, CPSI, and academic institutions such as Dalhousie University and the University of Toronto. As a result, a number of research programs have been initiated and studies undertaken to address such gaps, such that "research on prehospital care is improving, and a growing collection of

evidence exists to support many interventions provided in the prehospital environment" (Jensen, Petrie, Cain & Travers, 2009, p. 668).

Despite these gaps, evidence-based medicine has had an impact in several areas of paramedic practice. One area this is evident is the Ontario Stroke System, which was developed by the MOHLTC and the Heart and Stroke Foundation of Ontario (HSFO) and implemented between 2000 and 2004 (Lewis et al., 2006, p. 50). As a result of research by the U.S. National Institute of Neurological Disorders and Stroke (NINDS) showing that rapid thrombolytic treatment significantly improves health outcomes of stroke patients (NINDS 1995), the HSFO developed a stroke strategy for Ontario, involving a system of appropriately resourced regional and district stroke centres with protocols for stroke patient care. An integral part of this strategy was that "The EMS system needs to be organized to treat stroke as a medical emergency of the highest priority" by "training EMS personnel to recognize acute stroke and the implementation of stroke management protocols" (HSFO, 2000, p. 84), in order to ensure that stroke patients were able to receive this treatment within the optimum timeframe. This led to the development in 2004 of a Paramedic Prompt Card for Acute Stroke Protocol by MOHLTC (revised 2011), which authorizes patient redirect or transport to a designated stroke centre, bypassing community hospitals or other medical facilities that may be closer but lack the resources for treating stroke (MOHLTC EHSB, February 2011). A study on the effects of this protocol in Toronto concluded that it "was immediately successful in its primary objective of improving tPA access for eligible patients with stroke" (Gladstone et al., 2009, p. 3843).

A similar protocol exists for ST-segment elevation myocardial infarction (STEMI), whereby paramedics who have 12-lead ECG acquisition within their scope of practice can patch directly to a cardiologist to activate the catheterization lab and bypass other medical facilities. However, this protocol is not implemented province-wide, as such resources are not available in all regions (Beausoleil, 2012, p. 7; see also Cardiac Care Network of Ontario, 2010).¹⁵

Paramedics participated in the Ottawa Hospital Research Institute's Ontario Prehospital Advanced Life Support Study (OPALS), a large-scale study of prehospital interventions and their impacts on different groups of adult patients. Results published in 2005 showed that in the case of out-of-hospital cardiac arrest "advanced life support programs showed no improvement in survival rates compared to basic life support with rapid defibrillation programs" (Stiell, 2005, p. 1; see also Stiell et al., 2004). Results published in 2007, however, showed that the addition of out-of-hospital ALS interventions in cases of respiratory distress did lead to a decrease in the rate of death (Stiell et al., 2007). A third study, the OPALS Major Trauma Study, showed that in cases of major trauma, "systemwide implementation of full advanced life-support programs did not decrease mortality or morbidity for major trauma patients" (Stiell et al., 2008). Other studies have supported the OPALS conclusions (Isenberg & Bissel, 2005; Liberman &

¹⁵ The most recent region in Ontario to introduce the STEMI Bypass protocol is that under the Central East Prehospital Care Program (CEPCP) (the Base Hospital Program), which implemented the protocol in January, 2013 (CEPCP website).

Roudsari, 2007; Seamon et al., 2013). A systematic review of the literature by Jensen et al. (2010) showed that "current evidence does not support a difference in outcome between TI [tracheal intubation] and AAT [alternative airway techniques]" (p. 139). In contrast, Stiver and Manley's study (2008) suggested that "on-scene stabilization and the quality of care in the field is as important as speed in improving outcomes following severe [traumatic brain injury]" (p. 5).

As a result of studies showing the benefits of out-of-hospital continuous positive airway pressure (CPAP) and the feasibility of its application by PCPs (Kosowsky et al., 2000, 2001; Kallio et al., 2003; Thompson, Petrie, Ackroyd-Stolarz & Bardua, 2008), this therapeutic technique was incorporated into the ALS as an auxiliary medical directive (ALS, pp. 3-4-3-6, 4-5-4-7). Further studies have confirmed the efficacy of this approach (Cheskes, Thomson & Turner, 2012; Dib, Matin & Luckert, 2012; Williams, Finn, Perkins & Jacobs, 2013; Williams, Boyle, Robertson & Giddings, 2013).

Paramedics are also participating in two studies by the Regional Paramedic Program for Eastern Ontario (RPPEO), one on the out-of-hospital use of the cervical spine rule (Vaillancourt et al., 2009) and the other a paramedic-driven study on airway management (RPPEO, n.d.), and in a study being conducted by the Resuscitation Outcomes Consortium (ROC) on continuous chest compressions versus standard CPR (ROC website).

Another initiative to address research gaps is the Canadian Prehospital Evidence Based Practice Project (EMSPEP), "a collaborative effort of Canada's EMS physicians, paramedics, Dalhousie University Division of EMS and Emergency Health Services NS". This was started in 1998, and aims "to catalogue EMS studies", "to be a resource for the development of local EMS protocols", and "to develop a process of using evidence to evaluate practice change suggestions made by paramedics" (EMSPEP website). The PEP database contains analyses of over 100 paramedic protocols with respect to studies that provide strong, fair or weak evidence that is either supportive, neutral or against the protocol. The aim is to enable paramedic practitioners "to see exactly what evidence backs the interventions you use in the field or possibly why certain interventions have been revoked over time. PEP identifies gaps in the knowledge..." (EMSPEP website). EMSPEP researchers, in collaboration with others, have recently outlined a methodology to develop a Canadian EMS research agenda similar to those in Australia and the U.S., to provide a foundation "to support an evidence-based approach to prehospital care" (Jensen et al., 2011b, p. 2). The project design comprises qualitative baseline interviews, a roundtable discussion among key informants and a Delphi consensus survey.

Rescu is a large-scale research project spearheaded by the University of Toronto's Division of Emergency Medicine that has established relationships with a number of Paramedic Services. This project focuses on issues related to trauma and cardiopulmonary resuscitation. One area this project is exploring is the use of "Therapeutic Hypothermia" (a proven technique for limiting brain damage in the case of cardiac arrest) in the out-of-hospital environment to initiate this therapy on a more timely

basis, thereby leading to lower incidences of brain damage, coma and mortality among cardiac arrest patients (Rescu website).

Standards of Practice set by the OPA or other Organizations

The OPA does not set standards of practice for either diagnostic/treatment modalities or services. Standards of practice for "licensed" paramedics are currently determined by MOHLTC EHSB with advice from the Base Hospital Programs, which also enforce the standards. The standards are contained in the BLS PCS (for PCP) and ALS PCS (for ACP).¹⁶

Continuous Professional Development

"Licensed" paramedics are required to undertake annual mandatory CME (24-40 hours for PCP, 40-80 hours for ACP, and over 80 hours for CCP). This includes both clinical and operational courses, the former provided by Base Hospital Programs, the latter by EMS. "Unlicensed" paramedics have no continuous professional development requirements, save those that may be required by their employer. The CME for "licensed" paramedics is oriented predominantly towards continuing competency rather than professional development. "Licensed" paramedics in Ontario more often pursue professional development through enrollment in education programs such as the ACP graduate certificate programs offered by Omge, such as flight paramedic and CCP programs, or through university degree programs. Additional pathways for professional development include educational delivery and involvement with Base Hospital Programs.

Proposed Scope of Practice

The OPA does not propose that the scopes of practice of registered paramedics under an Ontario College of Paramedics would differ from the way they are at present, save with respect to controlled acts. The scope of practice for each level of paramedic registered with the College of Paramedics would correspond to the current scope of practice, respectively, and will be coherent with the way these are in the NOCP, with the exception that controlled acts no longer be performed under delegation from medical directors of Base Hospital Programs. Under a College of Paramedics, practitioners would be authorized to perform the seven controlled acts within their scope of practice that they currently perform, as discussed previously. It is the OPA's view that delegation of controlled acts by paramedics should be consistent with the *RHPA* (ss. 27-28) and *O. Reg. 107/96*. In particular, it is expected that ACPs and CCPs will be authorized to delegate controlled acts for didactic purposes in their roles as preceptors.

Registered paramedics should be authorized to perform the same diagnostic and treatment modalities as authorized to their level at present. The limitations of practice for paramedics regulated under the *RHPA* should be consistent with the limitations "licensed" paramedics currently face, except that the performance of controlled acts

¹⁶ Since these are long documents (293 and 199 pages for the BLS and ALS, respectively), they have not been included with this application.

should no longer require authorization by the medical director of a Base Hospital.

The proposed scope of practice matches the current scope of practice of "licensed" paramedics in Ontario. As the current scope of practice serves to protect the public interest and provide adequate public protection, it is anticipated that there will be little change in this regard. However, the regulation of currently "unlicensed" paramedics within a College of Paramedics will further the public interest by providing greater public protection and increasing the public's choice of qualified, regulated health care providers. Since the proposed scope of practice is identical to the current scope of practice, overlaps with other currently regulated health professionals will stay the same, namely, with nurses, nurse practitioners, physicians, respiratory therapists, and midwives (see p. 8 for details).

Economic Impact of Regulation

Ontario College of Paramedics Business Plan

A business plan for the proposed Ontario College of Paramedics has been attached to this application as Appendix C.

Economic and Financial Implications

There is no anticipated initial impact on education and training programs, although this could change if it is determined that higher levels of paramedic education would better serve to protect the public interest. Such changes would have cost implications for both educational institutions and those seeking to enter the profession. The current regulatory system requires ACP programs to maintain CMA accreditation. Under the *RHPA* there may be a requirement for PCP and CCP programs also to maintain such accreditation. Although several PCP programs in Ontario are already CMA-accredited, if this were to be made mandatory it could have cost implications for educational institutions.

Extending the scope of regulation to include all currently "unlicensed" paramedics would allow greater opportunity for paramedics to provide health care services beyond the out-of-hospital environment (e.g., in the community working with public health, community clinics, and ER rooms), as is starting to be the case with Community Paramedic Programs. This would help to address the scarcity of human resources in the health care system. Self-regulation would also adjust continuous quality improvement (CQI) for paramedics to align it with the approaches used by other self-regulated Colleges in Ontario. It would reduce the onerous annual requirements paramedics currently face extensive CME hours and recertification, and also give paramedics the opportunity to broaden their medical and treatment knowledge. However, it is possible that in future CME would be offered by various institutions on a cost recovery basis, which could have cost implications for paramedics. It is anticipated that efficiencies will be realized as CQI activities will be centralized under one institution thereby eliminating overlap which presently occurs under the current regulatory regime (e.g., investigations and disciplinary actions).

Access to care would be improved under self-regulation, as currently "unlicensed" paramedics would be able to perform controlled acts and other services outside of EMS, thus enabling them to work within a provincially regulated scope of practice in non-traditional roles which will result in better use of clinical resources. It is also anticipated that there will be overall efficiencies and cost savings in the health care system as processes for mandatory functions will be streamlined and duplication will be eliminated.

It is anticipated that self-regulation would have no negative impact on service efficiency and costs, and could well have a positive impact as CME and other quality assurance processes would be streamlined, with a concomitant reduction in the time paramedics are required to spend on these activities compared to the current level.

As detailed in the OPA's College of Paramedics business plan (Appendix C), the number of paramedics already regulated under the *Ambulance Act* provides a realistic base for financial sustainability of a College of Paramedics.

In the profession in Ontario, there is a significant cohort of paramedics with senior management experience, acquired through their work as Chiefs, Deputy Chiefs and other positions in Ontario's 51 Paramedic Services (or EMS). Such experience involves administration and financial and human resources management. It also involves responsibility for continuing education (both operational and clinical) and for quality assurance (e.g., responding to complaints, hosting MOHLTC EHSB site inspections, etc.). Paramedics across the province are also well-versed in Base Hospital Program functions, from their work as Directors, Managers and Coordinators, and some have held senior management positions in the MOHLTC EHSB. A number of paramedics are currently active in professional associations such as the OPA, the OPA's regional chapters, the Paramedic Association of Canada, or the Ontario Association of Paramedic Chiefs, work that involves management skills and public communication abilities.

Many paramedics in Ontario have been or are involved in paramedic education programs at one of Ontario's CAATs or for private colleges and non-educational institutions such as Toronto EMS and Ornge, both as educators and as administrators. Such experience provides the profession with a large pool of people who understand the relationship of such programs to paramedic competencies and entry-to-practice requirements. In addition to their education in paramedic programs, a significant number of paramedics also possess undergraduate and graduate university degrees. Because of the very nature of their professional practice, paramedics are trained to be highly aware of public concerns, and develop the skills to communicate effectively with non-professionals. Finally, paramedics are well-versed in communicating to and interacting with other health care professionals, again as a result of the unique conditions of paramedic health care delivery. For these reasons, the OPA can state with confidence that the profession has the requisite experience to ensure it can successfully deliver the statutory functions required of a regulatory College of Paramedics.

Costs to Employers

Ontario EMS would not incur any additional employment costs as a result of paramedic self-regulation, as they already have systems in place to facilitate existing statutory continuing competence and recertification requirements. As one of the intentions of self-regulation is to shift responsibility and accountability for continuing competence to individual practitioners themselves, it is unlikely these employers would face additional costs on that account. Private medical transportation and event medical services companies that employ currently unlicensed paramedics could, however, see some of their costs increase if they were required to provide additional systems for CME and continuing competency.

Costs to Professionals' Time

At present, licensed paramedics in Ontario are required to complete 24 to 40 hours (PCP), 40 to 80 hours (ACP), and more than 80 hours (CCP) of CME annually. Base Hospital Programs provide 8 hours (PCP) or 24 hours (ACP) CME and administer annual recertification (a process that usually takes one 8-hour day). Such CME involves specific courses (e.g., Semi-Automatic External Defibrillation (SAED), Symptom Relief) and electives. The remaining CME hours are provided by EMS. CME compliance is seen by paramedics as the most time-consuming professional requirement. Although CME will still be required under self-regulation, it is anticipated that the time involved for registered paramedics would be no greater, and may well be less (for example, if recertification is conducted on a risk basis, as is the case with other regulatory Colleges in Ontario).

Regulatory Mechanisms

"Unlicensed" paramedics in Ontario are not subject to any regulatory mechanism. "Licensed" paramedics, on the other hand, are subject to regulation under the *Ambulance Act, 1990*. The regulatory mechanism determined by the *Act* involves oversight by the MOHLTC EHSB, EMS, and the Base Hospital Program in the form of MOHLTC approval of educational programs, MOHLTC certification (in actual fact, both a certification and registration requirement), Base Hospital Program certification (in actual fact, the licensing requirement for paramedics employed by EMS), and quality assurance by MOHLTC EHSB (complaints and investigations), EMS (continuing medical education and complaints and investigations) and the Base Hospital Program (continuing medical education, annual recertification, and complaints and investigations). A diagram of the current regulatory mechanism is shown in Figure 1 of this application.

Paramedic Regulation under its own College

The OPA believes that paramedics in Ontario should be regulated under its own College, because the current regulatory approach is inconsistent with the regulation of other health professionals with whom paramedics, as an integral part of the Ontario health system, interact on a daily basis (particularly ER nurses and physicians), despite the fact that paramedics perform many of the same controlled acts. Indeed, as pointed

out by the Land Ambulance Transition Task Force in 1998, it is inconsistent that health professionals who only perform non-invasive acts are granted self-regulation, but the paramedics who are delegated to administer powerful drugs and perform invasive acts are not (LATT, 1998, p. 7).

A significant advantage to a self-regulation under a College of Paramedics will be the establishment of one regulator for all paramedics in Ontario, unlike the current system where regulatory responsibilities are shared by the MOHLTC, 51 EMS, and eight Base Hospital Programs. Despite best efforts, such a large number of actors in the regulatory system makes it inevitable that there will be discrepancies and inconsistencies in the requirements and expectations paramedics face in terms of demonstrating continuing competency and satisfying CME requirements. The inclusion of "unlicensed" paramedics would also be a significant advantage.

Health professions are regulated to ensure the public is protected when they seek or receive health care. Self-regulation is based on the concept that members of a profession, based on their knowledge, skills and judgment, are best suited to govern their profession in the public interest. With the advent of the NOCP, a defined and very specialized body of competency requirements has been accepted for entry into the practice of paramedicine. Paramedics are recognized as health care providers, generally working in uncontrolled environments with very little direct supervision. Taking all of this into consideration, coupled with the growth of the profession in the past decade, it is logical to suggest that self-regulation of paramedics through a College under the *RHPA* should ensure the public is adequately protected in this field.

Paramedic self-regulation under the *RHPA* would allow flexibility for the profession to adopt evidence-based best standards of practice and policy through interprofessional collaboration with other regulated health professions, and ensure accountability, transparency and public protection. A College of Paramedics would assure the public of the knowledge, skill, proficiency and competency of registered paramedics.

Alternative Forms of Regulation

The OPA does not consider regulation within an existing regulatory College a viable option. Out-of-hospital paramedic practice is unique in that it typically takes place in relatively uncontrolled environments, and paramedics responding to medical and traumatic emergencies are called upon to assess and treat patients independently whenever and wherever their emergency occurs. They are considered experts in the provision of this type of health care. As well, with an ever-growing number of practitioners (around 7000 "licensed" and up to 3,000 "unlicensed" paramedics at present), significant oversight of paramedic practice is required that only a College of Paramedics could adequately provide.

Given that "licensed" paramedics are already regulated, the OPA considers that it would be problematic to partner with any unregulated professions in seeking self-regulation. It is also unaware of any unregulated health professions that have a similar body of knowledge or scope of practice to paramedics. The OPA also considers that voluntary

self-regulation would be highly inappropriate for the profession and would not serve to protect the public interest, given the risk of harm paramedic practice involves. Accreditation is appropriate for educational programs, but not for governance of individual practice. The current regulatory system does function to protect the public interest, but is complicated and inefficient, and does not allow for adequate input on the part of paramedics.

Legislation in Other Jurisdictions

A list of the legislation regulating paramedics in other Canadian jurisdictions, in several U.S. states, and in Australia and the U.K. has been attached as Appendix D.

Leadership's Ability to Favour the Public Interest and Membership Support and Willingness of the Profession to be regulated

The OPA's mission statement is:

To provide leadership and direction to Paramedics on a Provincial level through the pursuance of self-regulation and the promotion of the science of Paramedicine. We serve Paramedics and patients by advocating for the highest ethical, educational, and clinical standards (Ontario Paramedic Association website).

Since it was founded in the mid-1990s, the OPA has engaged in a number of activities aimed at improving the paramedic profession, including the "OPA Queen's Park Lobby Days", "Send The Pros Campaign", and regular participation on provincial and national EMS committees. In 2001, the OPA held its first provincial conference focusing on education & networking for paramedics. The OPA's "Paramedicine" conferences have grown to become the premier Paramedic education conference in Canada (Ontario Paramedic Association website). In recent years, the OPA has focussed on the following objectives:

- **Clinical Excellence:** The OPA will lobby the Ministry of Education and Training, and the Community Colleges to adopt the Paramedic Association of Canada's National Occupation Competency Profile (NOCP) as the minimum standard for education at each given scope of practice. The OPA will also lobby the Ministry of Education and Training to add the Advanced Care Paramedic Program to the list of programs that receive funding from the Provincial Government.

The OPA will take a stronger leadership role in Continuing Medical Education (CME) for Paramedics and future Paramedics. We will attempt to hold quarterly one (1) day CME sessions at various locations across Ontario, education that is current, relevant and interesting. Beyond this the OPA hopes to provide increased opportunities for Paramedic students by offering EMCA/Centralized Testing preparation course.

- **Public Education and Awareness:** The OPA will attempt to use various media formats to better educate the public with respect to Paramedics and the role they play with the health care team. The OPA will prepare and make available to Chapters presentations that are suitable for children of all ages to be used during school visits (Ontario Paramedic Association website).

The Ontario Paramedic Association's Code of Ethics has been attached as Appendix E.

Complaints and Disciplinary Procedures

There are currently three separate complaints and disciplinary processes for "licensed" paramedics in Ontario, managed by EMS, MOHLTC EHSB and the Base Hospital Programs, the latter which have existed in one form or another since the *Ambulance Act*, 1990 came into effect. Until January 1, 2001, ambulance services in the province were the sole responsibility of the MOHLTC EHSB; EMS complaints and disciplinary procedures would have come into effect after that date. The 21 Base Hospital Programs were realigned in 2008 to form seven Regional Base Hospital Programs (now eight, including Ornge). It is not known to what extent their current complaints and disciplinary processes differ from previously.

Data presented above show that very few complaints investigated by MOHLTC EHSB resulted in paramedic rewrite, or a form of corrective action. Anecdotal evidence indicates that the number of complaints EMS receive varies from one service to another, but more often concerns operational rather than clinical matters. The OPA has no data on Base Hospital Programs' complaints and disciplinary processes, nor on how effective these and other processes have been at identifying and correcting incidents of substandard care and other infractions.

There are no proactive, self-initiated complaints processes for "licensed" paramedics in Ontario. They are required to report incidents in which they believe they may have acted below the required standards of care, but this is part of ongoing quality assurance, rather than a complaints process.

Survey of Ontario Paramedics Support for Self-Regulation

In February – March 2013, the OPA conducted an online survey to determine the level of support among paramedics, paramedic educators and former paramedics. The number of valid responses was 1,821, more than 95% from paramedics. As shown in Figure 3, more than 54% of those surveyed strongly supported paramedic self-regulation under the *RHPA*. See Appendix F for survey details.

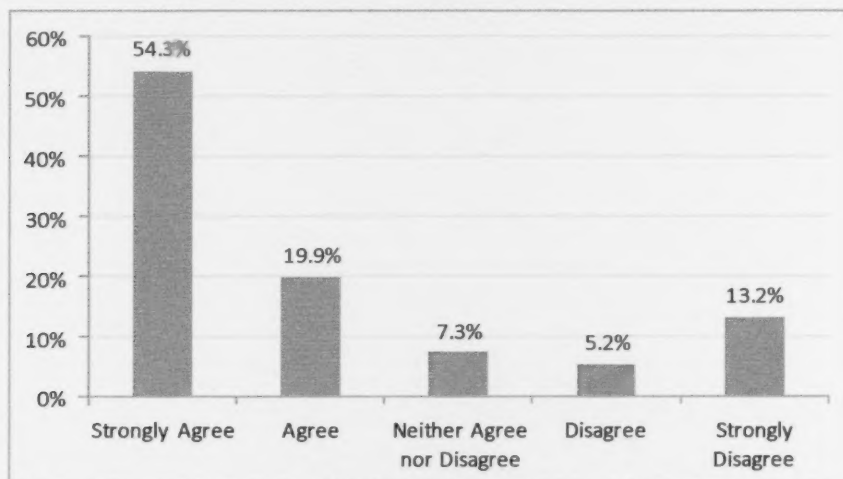


Figure 3. Ontario Paramedic Association 2013 Survey of Support for Self-Regulation (n=1,821)

Support from Related Organizations

The OPA has contacted the Base Hospital Programs, existing regulatory Colleges in Ontario, paramedic educators, and allied organizations and associations in other Canadian jurisdictions to determine their support for paramedic regulation under the *RHPA*, and received letters from a number of organizations (see Appendix G). Responses were received from the Saskatchewan College of Paramedics, the College of Midwives of Ontario, the College of Massage Therapists of Ontario, the Ontario Association of Paramedic Chiefs, and several paramedic educators. The Ontario Base Hospital Group has indicated that "provincial base hospital programs support the concept of a professional body for paramedics".

Number of Paramedics in Ontario

According to the MOHLTC EHSB, there are currently around 7,000 "EMS personnel" in Ontario. This number may include Ambulance Call Officers, as does a number supplied by HPRAC (n.d., p. 4) of 7,217. Although the OPA does not have an exact figure, it is reasonable to assume that there are around 7,000 "licensed" paramedics in Ontario. Informal information indicates that there may be up to 3,000 "unlicensed" paramedics. Approximately 1,500 "licensed" paramedics belong to the OPA.

Alignment with an Existing Regulatory College

The OPA's view is that it would be inappropriate, given the current regulatory system for "licensed" paramedics, for it to undertake actions to align the profession with any established health professions regulatory College. It would also be ineffective, given the complexity of the current regulatory system.

Proposed Fee Structure

The annual membership fee proposed is \$500 for all levels of paramedics (i.e., PCP, ACP, and CCP). This is in line with the annual fees for other regulatory Colleges in Ontario. Sixteen of the 21 regulatory Colleges in Ontario have fees higher than \$500, two have lower fees, and two have fees of \$500. It is anticipated that this fee level will provide the necessary financial resources for the College to fulfill its statutory functions, while at the same time not placing undue hardship on members of the profession.

It is expected that initial registration, equivalence assessment, and entry-to-practice examination will be carried out on a cost-recovery basis.

Health System Impact

Interprofessional Collaboration

The issue of inter-professional collaboration has taken on increasing importance in Ontario's health care system in recent years because, as HPRAC has argued, there is

a gradual trend toward breaking down the exclusive control or monopolies that some health professions have had in the delivery of care, to allow overlapping scopes of practice, and to move toward active cooperation among health professions to benefit the patient (2008b, p. 2).

This issue has its roots in the development of the regulatory system towards "a system of "licensed acts", rather than licensed professions" (HPRAC, 2008b, p. 3). Rather than license individual health care providers, this new system seeks to protect the public interest by regulating the acts these individuals perform that carry a risk of harm. One of the primary aims, then, is to examine ways in which regulated health professions can collaborate in developing standards of practice and practice guidelines where these professions share controlled acts. On the one hand, this aims to protect the public interest by ensuring that best practices are shared between the professions. On the other, it aims to improve the quality of, and potentially increase access to, health care by facilitating interaction and collaboration among different health professions in the provision of health care to patients.

Because of the unique nature of prehospital care, paramedics have typically had fewer opportunities for ongoing interaction with other health professions. Whereas nurses, physicians, respiratory therapists, medical laboratory technicians and so on may often work together in the hospital or clinical environment, paramedic interaction is more episodic in nature, occurring most often when patient care is handed over after arrival at the ED. Even though all "licensed" paramedics in Ontario currently work under delegation from the medical director of a Base Hospital Program, their interaction with physicians may be intermittent.

Nevertheless, interprofessional collaboration is a significant issue for paramedics, particularly because they perform controlled acts without direct supervision. The level of

education and training that paramedics undergo, along with their continuing competency requirements (which are more onerous than any of the health professions regulated under the *RHPA*), when combined with their experience working in uncontrolled environments, means that they have the necessary competencies to support and sustain interprofessional collaboration on practice standards and guidelines, particularly in the performance of controlled acts under such conditions. However, the lack of paramedic self-regulation in Ontario is a barrier to effective interprofessional collaboration.

HPRAC has argued that "[i]nterprofessional collaboration... is a broader concept than interprofessional care", which "takes place at the clinical level" (2009, p. 8). To date, paramedics have been more involved in the latter than the former.

As Community Paramedic Programs increase in prevalence to address inadequacies in the health care system that affect the level and quality of care some residents enjoy, paramedics are starting to interact more extensively with other health care providers, and are partners in efforts to seek effective solutions to patients' ongoing but non-emergent health problems. For example, the CREMS program, as discussed previously, enables paramedics to refer patients to CCACs so that they can access services such as occupational therapy, physiotherapy and nursing in their homes, rather than calling for emergency transport. The positive results of CREMS depend on the understanding paramedics have of the range of determinants of health and the services available to residents, as well as on their ability to understand underlying conditions and suggest alternatives to emergency transport. Such a program would be less effective if paramedics were not in a position to support interprofessional collaboration.

Another example where paramedics have shown that they possess the competencies necessary for interprofessional collaboration is the extended roles they have been asked to assume in parts of Nova Scotia, where access to physicians is problematic. The remoteness of Long and Brier Islands, in the Bay of Fundy, had made it difficult for the communities there to have a resident physician. As a result, residents were forced to use EMS and EDs for a wide range of medical issues. A Community Paramedic initiative was able to provide more timely health care access and treatment for less urgent conditions such as management of simple wounds and the administration of tetanus injections and flu immunizations, and was successful enough to be expanded to include a nurse practitioner and an offsite physician. This collaborative effort has seen a decrease in ED visits, and better access to and continuity of health care for residents. (Martin-Misener, Downe-Wamboldt, Cain, & Girouard, 2009).

Recently, in another small community in Nova Scotia, the lack of physicians had led to ER closures and long wait times for doctor's appointments, which has led to paramedics and nurses now staffing what are called "collaborative emergency centres" overnight, with an off-site physician to advise when needed. According to David Wilson, Nova Scotia's Minister of Health and Wellness, this initiative has led to a reduction in wait times for appointments with physicians (Morrison, 2013).

"Licensed" Paramedics collaborate most frequently with RNs, NPs and physicians in Emergency Departments, in the provision of interprofessional care. They also collaborate with physicians working for Base Hospital Programs in the provision of continuing medical education and the review of medical directives and protocols. Because they currently perform controlled acts under the authorization of the medical director of a Base Hospital Program, they are required to report incidents where they may have performed below the required standard of care, to provide all Ambulance Call Reports (involving controlled acts) for Base Hospital Program audit, to undergo CME and recertification procedures as determined by the Base Hospital Program, and finally to cooperate in investigations that the Base Hospital Program chooses to execute. Therefore, the reporting structure is highly hierarchical.

Paramedics in Ontario have not had the opportunity to increase interprofessional collaboration as effectively as is desired, because they are not self-regulated, and the current regulatory system is overly complex and unwieldy. As HPRAC has argued,

Enabling professionals to perform more tasks independently, consistent with their competence, will enhance their ability to work with others as part of the health care team. Existing professions will be able to take on new or altered roles in a collaborative environment as barriers that keep them from practicing to their full potential are removed (2008c, p. 9).

The OPA's view is that self-regulation within a College of Paramedics would remove such barriers for paramedics, thereby improving and increasing interprofessional collaboration by making it possible for the profession to engage effectively with other regulated health professions to establish best practices in the performance of controlled acts and other clinical treatments.

Labour Mobility

As stated on the MOHLTC EHSB website,

The Emergency Health Services Branch of the Ministry of Health and Long-Term Care (MOHLTC) continues to be an active supporter of paramedic mobility in Canada. To this end, Ontario has a revised equivalency process for Primary Care Paramedics (PCP) and Advanced Care Paramedics (ACP) licensed/registered in other Canadian provinces and territories. This revised process meets the most recent updated requirements of the Labour Mobility Provisions (Chapter 7) of the Agreement on Internal Trade (AIT).

The Ministry of Health and Long-Term Care (MOHLTC) AIT Paramedic Equivalency process ensures that paramedics who hold a valid license or certification in good standing from another Canadian province or territory as a PCP or ACP have employment opportunities in Ontario (MOHLTC EHSB website).

Despite these provisions, relatively few paramedics from other provinces apply for MOHLTC AIT Paramedic Equivalency (see Table 3). Self-regulation within a College of Paramedics would preserve and protect mobility between Canadian jurisdictions, and would seek to enhance it by streamlining the process and ensuring that requirements for entry-to-practice in Ontario are consonant with those in other jurisdictions, for example, through the use of the NOCP.

As discussed above, the NOCPs were developed by PAC as national entry to practice standards, and have been adopted as such by various jurisdictions across Canada, including Ontario for ACPs. The Canadian Organization of Paramedic Regulators is currently working on a national examination scheme.

To the best of the OPA's knowledge, there are no other Canadian jurisdictions in which paramedics are authorized to perform procedures and tasks beyond those sought by the OPA in this application, although the particular level at which a paramedic may perform a particular procedure or controlled act may differ, since other Canadian jurisdictions may use different level classifications from those in Ontario. This means that paramedic scopes of practice from other provinces may not map one-to-one onto those in Ontario. However, recent trends indicate that there is a growing convergence among Canadian jurisdictions as the use of the NOCP becomes more widespread.

Under the current regulatory system, paramedics trained in other provinces are not assessed for equivalency on the basis of their designation, but rather in terms of their competencies. It is anticipated that an Ontario College of Paramedics would maintain a similar approach.

Self-regulation within a College of Paramedics would increase the supply of licensed paramedics, as it would enable the many currently "unlicensed" paramedics to become registered.

Access to Care

The OPA's view is that the current regulatory system was enacted in order to enhance access to pre-hospital emergency medical care provided by "licensed" paramedics in a way that protects the public interest. Self-regulation within a College of Paramedics would enhance access to this type of care, as it would allow for more efficient and effective adoption of new treatments, technologies and best practices in collaboration with other regulated health professions. It would also increase the availability of registered paramedics to work in non-emergency settings such as community clinics, private medical transportation companies, event medical services, and so on, thereby increasing public access to qualified health care providers in such environments.

Health Human Resource Productivity

The OPA does not currently have the capacity to measure productivity. Individual Paramedic Services may do so, and MOHLTC EHSB measures the productivity of the ambulance component of EMS, but this information is not available to the OPA. Nevertheless, the inclusion of the large body of currently "unlicensed" paramedics under

a College of Paramedics would allow the time, effort, skills and knowledge of these individuals to contribute more extensively to the provision of health care for Ontario's residents. In addition, it would allow paramedics to collaborate more effectively with other regulated health professions, thereby increasing efficiency. Finally, registered paramedics would be able to participate more effectively in the provision of primary care. According to the National EMS Advisory Council (NEMSAC),

EMS makes a difference with its expanding role in the healthcare system. EMS has the potential to provide improved patient outcomes and more customer satisfying primary care while offering clinically appropriate alternatives to hospital transport in addition to standard 9-1-1 responses. In a fully integrated healthcare system, EMS will provide preventive services, acute care, and overall community health (2009, p. 20).

Health Outcomes

The OPA does not currently have the capacity to measure health outcomes. However, it is evident that the provision of high-quality pre-hospital care by highly trained paramedics performing to best practices leads to more positive health outcomes for patients. NEMSAC's 2009 position statement reviewed the available evidence in a number of areas:

There is a considerable body of evidence documenting the importance of prehospital care in the treatment of ST-segment elevation myocardial infarction (STEMI), stroke, respiratory emergencies, pediatric care and trauma. The literature also suggest that these improvements in patient outcomes are cost effective, and that prehospital care within the context of an EMS system contributes to downstream healthcare savings. (2009, p. 1).

As discussed above, several studies have investigated or are investigating health outcomes related to paramedic practice. There are various research studies underway involving paramedic organizations such as EMSCC and PAC, partnering with institutions such as Dalhousie University, that aim to look at various aspects of health outcomes. Regulation of paramedics under the *RHPA* would increase the number of paramedics available to work in non-emergency settings such as Community Paramedic Programs, which have been shown to improve health outcomes, as in the Long and Brier Islands study (Martin-Misener, Downe-Wamboldt, Cain, & Girouard, 2009). It would also allow for more efficient and effective adoption of new treatments, technologies and best practices in collaboration with other regulated health professions, thereby increasing public access to health care, promoting public choice of health care provider, improving the efficiency and effectiveness of the health care system overall, and enhancing patient safety, all of which serves to better protect the public interest.

Appendices

Appendix A. Glossary of Terms

"licensed" paramedic	paramedic in Ontario working for an EMS and therefore authorized by the medical director of a Base Hospital Program to perform controlled acts
"unlicensed" paramedic	paramedic in Ontario not working for an EMS and therefore not authorized to perform controlled acts

Abbreviations Used

ACP	advanced care paramedic
A-EMCA	advanced emergency medical care assistant
AGO	Auditor General of Ontario
ALS	<i>Advanced Life Support Patient Care Standards</i>
BLS	<i>Basic Life Support Patient Care Standards</i>
CAAT	College of Applied Arts and Technology
CCP	critical care paramedic
CMA	Canadian Medical Association
CME	continuing medical education
CPAP	continuous positive airway pressure
CPSI	Canadian Patient Safety Institute
ED	emergency department
EHSB	Emergency Health Services Branch
EMA	Emergency Medical Attendant
EMR	emergency medical responder
EMS	Emergency Medical Services
EMSCC	Emergency Medical Services Chiefs of Canada
EMSPEP	Canadian Prehospital Evidence Base Practice
ETI	endotracheal intubation
HPRAC	Health Professions Regulatory Advisory Council
LATT	Land Ambulance Transition Taskforce
MOHLTC	Ministry of Health and Long-Term Care
MTCU	Ministry of Training, Colleges and Universities
NAEMP	National Association of Emergency Medicine Physicians
NEMSAC	National EMS Advisory Council
NEMSIS	National EMS Information System
NINDS	National Institute of Neurological Disorders and Stroke
NOCF	National Occupational Competency Profile for Paramedics
OPA	Ontario Paramedic Association
PAC	Paramedic Association of Canada
PCP	primary care paramedic
STEMI	ST-segment elevation myocardial infarction

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Appendix C. College of Paramedics of Ontario Business Plan



College of Paramedics of Ontario

Business Plan

COLLEGE OF PARAMEDICS OF ONTARIO BUSINESS PLAN

The business plan demonstrates the understanding and appreciation of the cost of regulation on the profession. The plan outlines the profession's ability to support the mandatory functions and includes the estimated financial resources required to provide these functions, and the profession's ability to generate the necessary financial resources through registration and ancillary fees. In order for the College of Paramedics of Ontario to be economically self-sustainable, the College would require:

- Revenue generation to support the required expenditures and additional specific costs relating to the College of Paramedics
- Allocate expenses to meet the mandatory functions under the *Regulated Health Professions Act*.

MANDATORY FUNCTIONS UNDER *RHPA*

1. Establishing requirements for entry to practice
2. Developing and promoting practice standards
3. Administering quality assurance programs
4. Enforcing standards of practice and conduct
5. Participating in the legislative/regulatory processes
6. Collecting and sharing statistical information about members

FINANCIAL FRAMEWORK OF THE COLLEGE

In order to assess the viability and sustainability of the College, the 2011 Financial Statements with specific focus on the Statement of Operations were compared among the 11 existing self-regulated Colleges¹⁷. After normalizing revenues and expenditures for depreciation and passive investment income, each College was analyzed for annual financial self-sustainability. Expenditures were also studied to provide reasonable ranges on a per capita basis.

¹⁷ College of Audiologists and Speech-Language Pathologists of Ontario, College of Chiropractors of Ontario, College of Dental Hygienists of Ontario, College of Dietitians of Ontario, College of Massage Therapists of Ontario, College of Medical Laboratory Technologists of Ontario, College of Medical Radiation Technologists of Ontario, College of Occupational Therapists of Ontario, College of Optometrists of Ontario, College of Physiotherapists of Ontario, Royal College of Dental Surgeons of Ontario

REVENUE GENERATION

MEMBERSHIP FIGURES

Current estimates put membership for paramedics providing both urgent and non-urgent care at 7,000 (MOHLTC EHSB website; HPRAC Backgrounder)

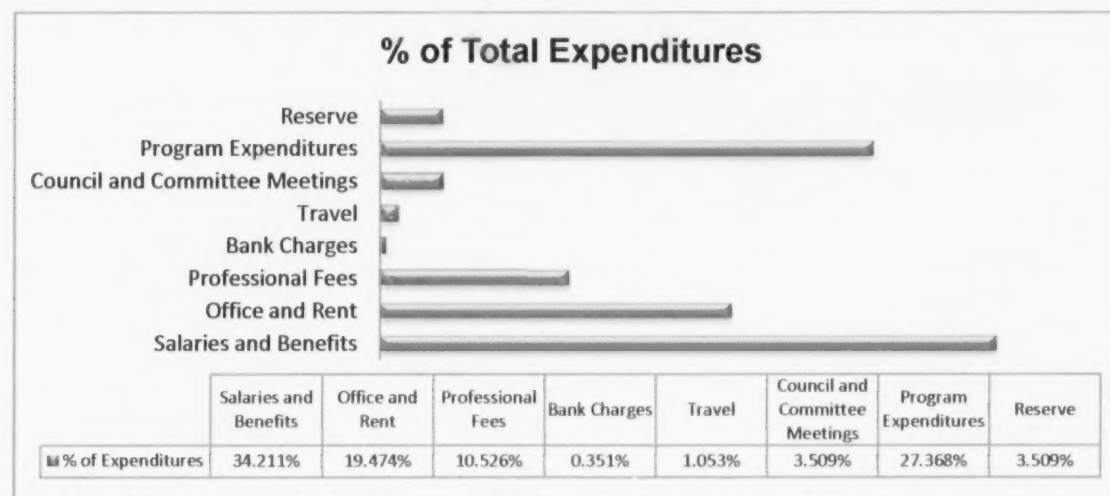
REVENUE COLLECTABILITY ADJUSTMENT

The existing regulated Colleges were examined on actual membership revenue collection on both a per capita basis and aggregate average. Exam fees and registration fees were also aggregated with membership revenues. The result was annual membership dues of \$500 per member, which made the College of Medical Radiation Technologists of Ontario an ideal financial model. Furthermore, to account for partial memberships or deferred revenue, the collectability was assessed to be at 83%.¹⁸

EXPENDITURE

The distribution of normalized expenditures was studied among the Colleges on a percentage of total normalized expenditures and a per capita basis. After using the figures as a reference point, amounts were reallocated to adjust for functions that would be more specific to the College of Paramedics of Ontario.

PERCENTAGE DISTRIBUTIONS



¹⁸ Based on the College of Medical Radiation Technologists of Ontario 2011 Statement of Operations to actual 6,707 members paying \$530 per annual dues

BUDGETED STATEMENT OF OPERATIONS COLLEGE OF PARAMEDICS OF ONTARIO

Revenues

Membership Fees	<u>\$ 2,900,000</u>
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Expenses

Management Salaries	300,000	
Office Staff	500,000	
Health and Pension	<u>175,000</u>	
<i>Total Salaries and Benefits</i>		975,000

Rent	200,000	
Building Insurance	10,000	
Postage & Courier	60,000	
Stationary & Supplies	110,000	
Information Management	<u>175,000</u>	
<i>Total Office and Rent</i>		555,000

Legal Fees	50,000	
Liability Insurance	150,000	
Accounting and Audit Fees	30,000	
Honoraria	30,000	
Sub-contracts	<u>40,000</u>	
<i>Total Professional Fees</i>		300,000

Bank Charges		10,000
Travel		30,000
Council and Committee Meetings		100,000

Communications	150,000	
Quality Assurance	250,000	
Investigation and Hearings	230,000	
Other Programs	<u>150,000</u>	
<i>Total Program Expenses</i>		780,000

Reserve		100,000
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Total Expenditures	<u>\$ 2,850,000</u>
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Excess Revenues over Expenditures	<u><u> </u></u>
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Appendix D. Legislation in Other Jurisdictions

Canadian Legislation

Paramedics are self-regulated in Alberta, Saskatchewan and New Brunswick, and similar legislation has received royal assent in Nova Scotia. The Paramedic Association of Manitoba has filed an application for self-regulatory status in that province and is currently awaiting review.

The legislation regulating paramedics in other Canadian jurisdictions is as follows:

Manitoba: *Emergency Medical Response and Stretcher Transportation Act*, C.C.S.M. c. E83. *Land Emergency Medical Response System Regulation*, E83 – M.R. 22/2006. *Air Emergency Medical Response System Regulation*, E83 – M.R. 20/2006. *Stretcher Transportation Services Regulation*, E83 – M.R. 21/2006.

Alberta: *Emergency Health Services Act*, R.S.A. 2008, c. E-6.6 and *Emergency Health Services (Interim Regulation)*, Alta. Reg. 76/2009, *Staff, Vehicle and Equipment Regulation*, Alta. Reg. 45/1999, *Health Disciplines Act*, R.S.A. 2000, c. H-2; *Health Professions Act*, R.S.A. 2000, c. H-7. The *Emergency Medical Technicians Regulation*, Alta. Reg. 48/1993, defines scope of practice.

British Columbia: *Emergency and Health Services Act*, R.S.B.C. 1996, c. 182. The *Emergency Medical Assistants Regulation*, B.C. Reg. 210/2010 defines scope of practice.

New Brunswick: *Ambulance Services Act*, S.N.B. 1990, c A-7.3. The Paramedic Association of New Brunswick has been given the authority to define scope of practice in its bylaws.

Nova Scotia: *Emergency Health Services Act*, S.N.S. 2005, c. 5. Note that the *Paramedics Act*, S.N.S. 2005, c. 10 has been passed but has yet to be proclaimed in force. Scope of practice in this province is defined through the paramedic employer.

Prince Edward Island: *Public Health Act*, R.S.P.E.I. 1988, c P-30. The *Emergency Medical Services Regulations*, P.E.I. Reg. EC472/00, defines scope of practice in a schedule.

Quebec: *An Act respecting pre-hospital emergency services*, RSQ, c S-6.2 and *Regulation respecting the professional activities that may be engaged in within the framework of pre-hospital emergency services and care*, RRQ, c M-9, r 2;

Saskatchewan: *Paramedics Act*, S.S. 2007, c P-0.1 and *Ambulance Regulations*, RRS c A-18.1 Reg 1. The Saskatchewan Emergency Treatment Protocol Manual outlines a scope of practice for each license.

In Canada, five provinces (Alberta, British Columbia, Ontario, Prince Edward Island and Quebec) define scope of practice through regulations, Nova Scotia defines scope of

practice through the paramedic employer, New Brunswick sets out its scope of practice in a bylaw and Saskatchewan uses its protocol manual.

A comprehensive listing of relevant American and international legislation and a listing of their respective scope of practice statements is not available to the OPA. The relevant legislation in the five most populous U.S. States (California, Florida, Illinois, New York and Texas) and in North Dakota, and Minnesota is as follows

American Legislation

California Health and Safety Code, Division 2.5 (Emergency Medical Services) (a.k.a. the Emergency Medical Services System and the Prehospital Emergency Medical Care Personnel Act); California Code of Regulations, Title 22, Division 9, Chapter 4 (Emergency Medical Technical Paramedic), California Code of Regulations, Title 22, Division 9, Chapter 3 (Advanced Emergency Medical Technician); California Code of Regulations, Title 22, Division 9, Chapter 2 (Emergency Medical Technicians); California Code of Regulations, Title 22, Division 9, Chapter 8 (Prehospital EMS Air Regulations); California Code of Regulations Title 22, Division 9, Chapter 11 (EMS Continuing Education)

Florida Statutes, Chapter 64J-1 (Emergency Medical Services); Florida Statutes, Chapter 401, Part III (Medical Transportation Services)

Illinois Emergency Medical Services Systems Act, 210 ILCS 50

New York State Public Health Laws, Article 30 (Emergency Medical Services); New York State Emergency Medical Services Code, Title 10, Part 800

Texas Health and Safety Code, Title 9, Subtitle B, Chapter 773 (Emergency Medical Services); Texas Administrative Code, Title 1, Part 1, Chapter 157 (Emergency Medical Services - Part A)

North Dakota Statutes, chapter 23-27 (Emergency Medical Services Licenses)

Minnesota Statutes 2010, chapter 144E (Emergency Medical Services Regulatory Board) and Minnesota Rules, chapter 4690 (Ambulance Services)

International Legislation

Australia: *Public Health Act 2005* (Queensland); *Ambulance Service Act 1991* (Queensland); Health, Drugs and Poisons Regulation 1996 (Queensland)

United Kingdom: *Health Professions Order 2001*

Appendix E. Ontario Paramedic Association Code of Ethics

The practice of Paramedicine requires knowledge and compassion, along with concern and sensitivity for the well being of the patient. In keeping with this philosophy, every Paramedic shall:

- Maintain certification with their respective ambulance services and the governing base hospital(s).
- Conserve life, alleviate pain and suffering and promote health.
- Provide care based on human need with respect for human dignity, unrestricted by consideration of nationality, race, creed, colour, status, sex, religion, sexual orientation, type of illness, or mental or physical disability.
- Without fail, protect and maintain the patient's safety, dignity and privacy.
- Preserve and protect the confidentiality of any information, either medical or personal, acquired through professional contact with a patient, except where the disclosure of such information is necessary to the treatment of the patient and the safety of other health care professionals or is required by the employer or the law.
- Not use professional knowledge, skills, equipment or pharmaceuticals in any enterprise detrimental to the profession or the public well being.
- During the performance of her/his duties he or she will conduct themselves in a manner that will reflect credit upon the profession.
- Encourage the trust and confidence of the public through high standards of professional practice, conduct, competence and appearance (Ontario Paramedic Association website).

Appendix F. Ontario Paramedic Association 2013 Survey of Support for Paramedic Self-Regulation



Survey of Support for Paramedic Self-Regulation – Preliminary Report

March 13, 2013

Conducted by *DeL* Services

Sponsored by the Ontario Paramedic Association

Introduction

In November, 2012, the Health Professions Regulatory Advisory Council asked the Ontario Paramedic Association (OPA) to complete an application to regulate paramedics under the *Regulated Health Professions Act, 1991*, in response to a request from the Minister of Health and Long-Term Care. One component of this application asked that the OPA "describe any consultation process undertaken" to determine whether "members of the profession/association want self-regulation".

In order to determine the level of support for self-regulation among paramedics in Ontario, the OPA conducted an online survey using FluidSurveys (Chide.it Inc.).

Methodology

The survey was conducted between February 26 and March 11, 2013, and was publicized through the OPA's website, through Facebook and Twitter, on the website of associated organizations such as the Professional Paramedic Association of Ottawa and the Toronto Paramedic Association, and through an email and attachment sent on February 26, 2013 to the Chiefs of Ontario's 51 paramedic services with a request to forward it to all paramedic employees (see Annex 1).

The survey consisted of a preliminary question asking for respondents' permission to collect personal data (name, employer, and ID numbers), followed by a series of branching questions relating to professional status. Three short paragraphs explaining the OPA's position introduced the single survey question, which asked the respondent to "Please indicate your level of support for paramedic self-regulation under a College of Paramedics" using a five-point Likert item from "Strongly Agree" to "Strongly Disagree" (for questionnaire, see Annex 2). Finally, respondents were asked for their comments.

For validation purposes, respondents were asked to provide their name and either (i) paramedic service and OASIS number (for paramedics currently working for Emergency Medical Services (EMS)), (ii) name of employer and A-EMCA number (for paramedics working for companies other than EMS), (iii) name of educational institution for paramedic educators, or (iv) name of paramedic service for former paramedics.

Data were exported into Microsoft Excel (Redwood, CA, USA) for validation, analysis and formatting, and charts were constructed using all data. The survey was carried out by DRL Services, Ottawa, and was commissioned by the Ontario Paramedic Association.

Results

Responses were validated against the data requested, and to eliminate duplications. Eleven responses were eliminated because they lacked sufficient validation data, and 104 responses were found to be duplicates (i.e., 52 respondents had completed the survey twice). Analysis of the latter showed that responses of more than half of the respondents (29) could be retained,

as they had reiterated their previous preference or had attached a comment indicating a change of preference. Seventeen respondents were excluded from the analysis as their duplicate responses were contradictory without comment (e.g., shifting from Neither Agree nor Disagree to Agree/Strongly Agree or to Disagree/Strongly Disagree, or from Agree/Strongly Agree to Disagree/Strongly Disagree), thus the indicated preference could not be validly determined. A further six respondents revised their responses to shift them in one direction of the scale (e.g., from Agree to Strongly Agree or from Disagree to Strongly Disagree). These responses have been included in the final total showing aggregate preferences in one direction or the other (Figure 7).

1,821 unambiguous valid responses were received during the survey period, 1,731 (95.3%) from paramedics working for EMS, 34 (1.9%) from paramedics not working for EMS, 15 (0.8%) from paramedic educators and 37 (2.0%) from former paramedics. Of this total, 989 (54.3%) indicated Strongly Agree, 363 (19.9%) Agree, 133 (7.3%) indicated Neither Agree nor Disagree, 95 (5.2%) indicated Disagree and 241 (13.2%) indicated Strongly Disagree (Figure 1).

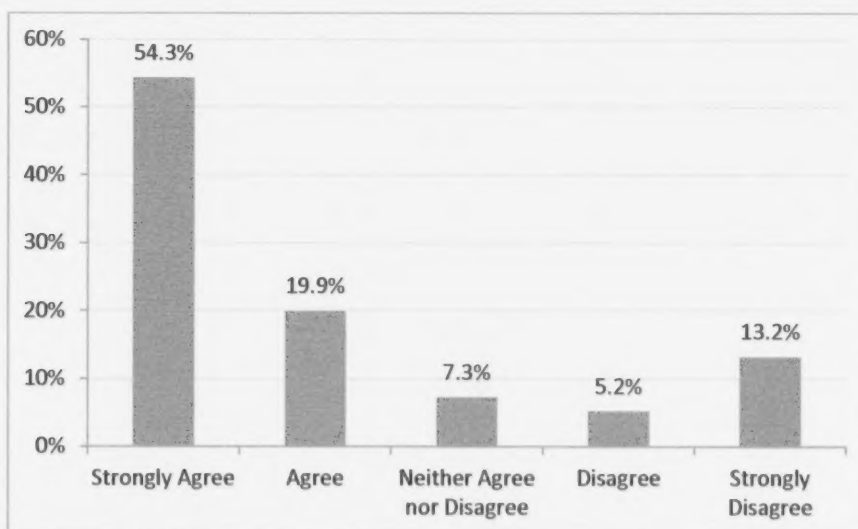


Figure 4. Ontario Paramedic Association 2013 Survey of Support for Self-Regulation – All Responses (n=1,821)

Figures 2 – 5 show the survey responses by each category of respondent.

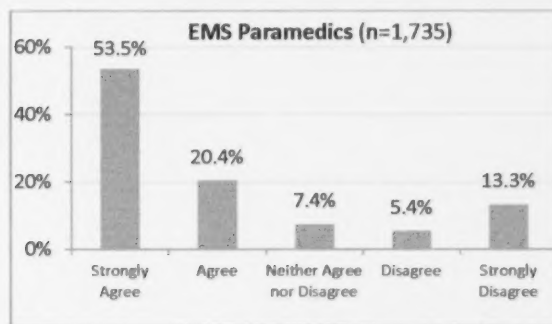


Figure 2

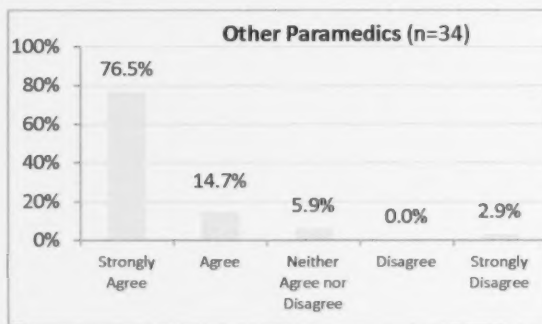


Figure 3

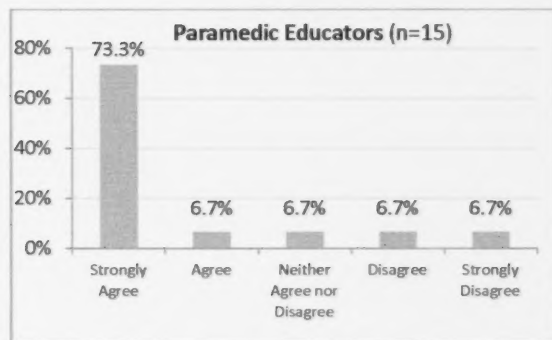


Figure 4

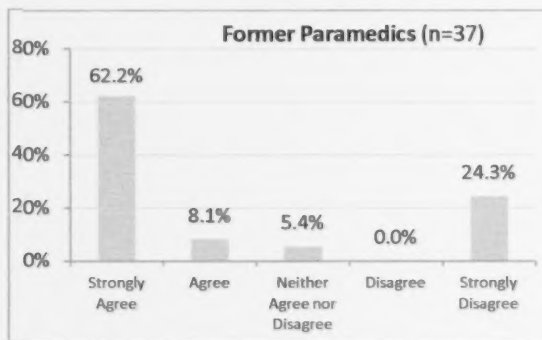


Figure 5

Figure 6 shows the aggregate data by response category. Given the ratio of responses, the paramedic category dominates the others.

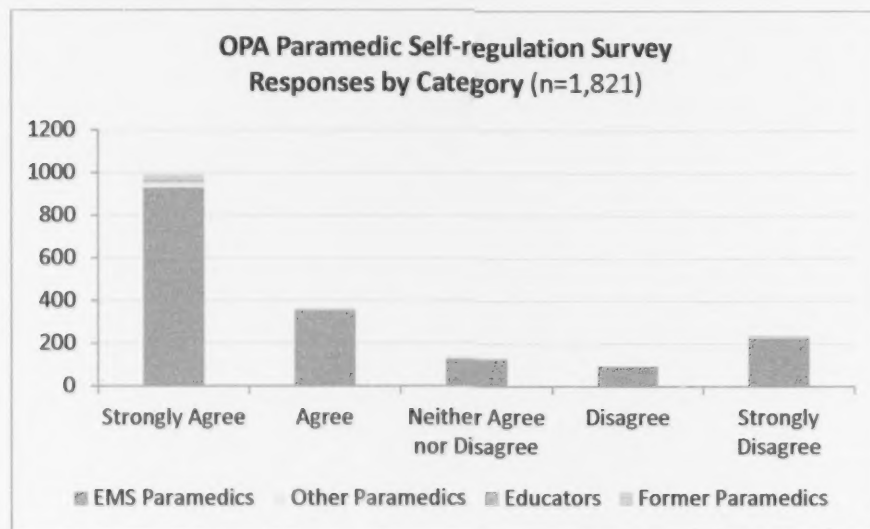


Figure 6

Figure 7 shows the survey responses aggregated in terms of those in favour (Agree/Strongly Agree), those neutral (Neither Agree nor Disagree) and those not in favour (Disagree/Strongly Disagree). (Note that for this aggregation, six responses have been included that were excluded from the above analyses, i.e., n=1827).

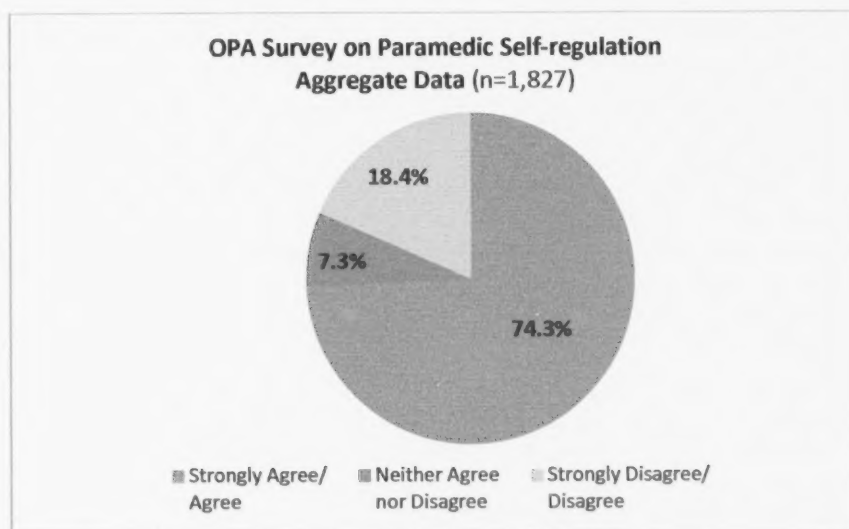


Figure 7

Discussion

Although the survey results show strong support for the question asked by the OPA, there are limitations to the survey. First, although there was a reasonably high rate of response among paramedics working for EMS (1,735 of an estimated total of 7,000, or almost 25%) as this is a preliminary report, the data have not yet been broken down by EMS or Paramedic Service. Therefore, the success of the OPA's distribution of the survey call letter to EMS has not yet been determined, and it is possible that responses from larger EMS, such as those in Toronto and Ottawa, are dominating the results. Second, there was no distribution of the call letter to private medical transportation and medical event services companies or to paramedic education institutions, as such contacts were not readily available in the timeframe within which the survey was constructed and publicized. Therefore, the low response rates from these groups, particularly the former, who it is estimated may number around 3,000, cannot be construed as representative, particularly as the survey addresses an issue that, it is believed, would be of great interest to that group.

Annex 1. OPA Letter to EMS



February 26, 2013
Attention: paramedics

Dear Colleagues,

As many of you are aware, the Ontario Paramedic Association (OPA) has been asked to submit an application for paramedics in Ontario to be regulated under the *Regulated Health Professions Act 1991* (RHPA). It has been the goal of the OPA and its members to seek professional status and protection of the title of "paramedic" for paramedics since 1995. Self-regulation of paramedics under the Regulated Health Professions Act has been an issue for many years. A 1998 report from the *Land Ambulance Transition Task Force* recommended this step "to address the key deficiencies of the ambulance service regulatory framework". The OPA proposes a streamlined system with a single regulatory body under which paramedics will be responsible for their own scope of practice.

As described by the Health Professions Regulatory Advisory Council, the regulatory framework of the RHPA is a "regulatory system that enables each of Ontario's thousands of health professionals to contribute to patient care to the full extent of their training and abilities, to collaborate with each other so that the efforts of all are deployed to produce the best possible results for patients, and to respond with up-to-date skills and a deep sensitivity to the rising expectations of today's health care consumers". At present there are over 20 health professions that have transitioned under this legislation including nurses, pharmacists, respiratory therapists and physicians, just to name a few.

You can visit the OPA's website to learn more about how self-regulation will affect paramedics:
http://www.ontarioparamedic.ca/professional_self-regulation/paramedic_faqs/

To respond to the Minister's request, and to help our profession take the next step in establishing credibility in the health care system and in the public eye, we need to hear from you. We need to hear from as many paramedics as possible to indicate the profession's support for the formation of a new regulatory College. Please complete the OPA's online survey at:
<http://fluidsurveys.com/s/opa-self-regulation/survey/>

The survey will be available until **March 11, 2013 at 12:00 noon**.

Thank you for your participation.

A handwritten signature in dark ink, appearing to read "Rob Theriault".

Rob Theriault BHSc., EMCA, RCT(Adv.), CCP(f)
President, Ontario Paramedic Association
rob.theriault@ontarioparamedic.ca

Ontario Paramedic Association:
MAPLERIDGE RPO 1875 LANSLOWNE ST W POBOX 21016 PETERBOROUGH ONTARIO K9J 8M7
1-800-OPA-LINE

Annex 2. OPA Survey Questionnaire

ONTARIO PARAMEDIC ASSOCIATION - SURVEY ABOUT PARAMEDIC SELF-REGULATION

Welcome

Welcome to the Ontario Paramedic Association's survey about paramedic self-regulation in Ontario. We are interested in the opinions of all paramedics and paramedic graduates in Ontario.

Privacy Statement

In order to collect valid data, this survey asks for three pieces of personal information: your name, your OASIS # or AEMCA # (if not currently working for a paramedic service), and your employer. The Ontario Paramedic Association (OPA) is committed to keeping your personal information confidential, secure and private. This information will only be used to ensure that each response is valid, and will not be used for any other purpose or disclosed to any third parties. The data will be retained by the OPA using a secure password protected electronic file storage system until the Ministry of Health and Long-Term Care (MOHLTC) reaches a decision on the OPA's application or as necessary to comply with any legislative requirements, whichever is longer, after which time it will be destroyed.

Permission

I agree to allow the Ontario Paramedic Association to collect my personal information for the purposes of validating this survey. ("No" terminates the survey.)

- ☐ Yes
☐ No

Name (required)

First Name

Last Name

Employment information for validation purposes

Employment

Do you currently work for an Ontario paramedic service?

- ☐ Yes
☐ No

Name of Paramedic Service

Please provide the name(s) of the paramedic services for which you work.

Primary Paramedic Service (required)

Second Paramedic Service (optional)

Third Paramedic Service (optional)

OASIS Number

Please provide your OASIS number.

Other Paramedic Employment

Do you currently work for a private company that employs people with paramedic training (e.g., non-emergency medical transportation services, event medical services, etc.)?

- ☐ Yes
☐ No

Private Medical Services

Please provide the name of the company you work for and, if available, your A-EMCA number.

Name of Company

A-EMCA Number

Educational Institution

Do you currently work for an educational institution providing paramedic education?

- ☐ Yes
☐ No

Name of Educational Institution

Please provide the name of the educational institution you work for.

Other

Are you a former paramedic?

- ☐ Yes
☐ No

Previous Employment

Please provide the name of the Paramedic Service for which you used to work.

About Paramedic Self-Regulation

Dear Colleague,

As many of you are aware, the Ontario Paramedic Association (OPA) has been asked to submit an application for paramedics in Ontario to be regulated under the Regulated Health Professions Act 1991 (RHPA). It has been the goal of the OPA and its members to seek professional status and protection of the title of "paramedic" for paramedics since 1995. Self-regulation of paramedics under the Regulated Health Professions Act has been an issue for many years. A 1998 report from the Land Ambulance Transition Task Force recommended this step "to address the key deficiencies of the ambulance service regulatory framework". The OPA proposes a streamlined system with a single regulatory body under which paramedics will be responsible for their own scope of practice. As described by the Health Professions Regulatory Advisory Council, the regulatory framework of the RHPA is a "regulatory system that enables each of Ontario's thousands of health professionals to contribute to patient care to the full extent of their training and abilities, to collaborate with each other so that the efforts of all are deployed to produce the best possible results for patients, and to respond with up-to-date skills and a deep sensitivity to the rising expectations of today's health care consumers". At present there are over 20 health professions that have transitioned under this legislation including nurses, pharmacists, respiratory therapists and physicians, just to name a few. To respond to the Minister's request, and to help our profession take the next step in establishing credibility in the health care system and in the public eye, we need to hear from you. We need to hear from as many paramedics as possible to indicate the profession's support for the formation of a new regulatory College.

Please indicate your level of support for paramedic self-regulation under a College of Paramedics

- ☐ Strongly Agree
☐ Agree
☐ Neither Agree nor Disagree
☐ Disagree
☐ Strongly Disagree

Do you have any comments?

Thank you for taking the time to look at our survey.

Appendix G. Letters of Support



February 22, 2013

Ontario Paramedic Association
1875 Lansdowne St. W.
Peterborough, Ontario K9J 8M7

Dear Mr. Theriault,

I am writing to you in support of the efforts occurring in Ontario to obtain self-regulatory status for paramedics.

The Saskatchewan College of Paramedics supports the privilege of self-regulation for all paramedics in Canada, including Ontario. Self-regulation would ensure that Ontario paramedics have the ability to service and protect the public through the registration, licensing, educating and disciplining of members of their self-regulated college.

Sincerely,

A handwritten signature in black ink, consisting of several loops and a long, sweeping underline.

Derek Dagenais
President

cc. Sheri Hupp, Executive Director

COLLEGE OF
MIDWIVES
OF ONTARIO



ORDRE DES
SAUVES-ENFANTS
DE L'ONTARIO

February 28, 2013

Rob Theriault
President, Ontario Paramedic Association
Mapleridge R. P. O.
P. O. Box #21016
Peterborough, ON K9J 8M7
rob.theriault@ontarioparamedic.ca

Dear Mr. Theriault,

I am writing to you to offer the College of Midwives of Ontario's support to the regulation of paramedics through the Regulated Health Professions Act (1991) (RHPA) in Ontario. We understand that this has been a long process for paramedics in the province and are pleased to hear that HPRAC is reviewing an application from your association in the coming weeks.

Paramedics and midwives work together across the province attending to women in labour when transport to hospital is required and at home births when extra hands and support are needed. Most recently, the College has engaged with local EMS units in consultation around birth centre planning; these contributions were extremely beneficial to all parties and have allowed for an understanding of the work that midwives and paramedics do and where they overlap.

Midwives have almost twenty years of experience in regulation in Ontario and the growth of the profession has served thousands of Ontario women and families. As the regulators of this profession we are able develop standards and policies that reflect changes in midwifery care and the health care system overall at a provincial level. The benefits of regulation are known to you and should be made available so that all Ontario residents can be assured of regulated paramedic services.

We hope to hear in the coming months that paramedics will be self-regulated in order to fulfill their work in protecting the public and enhancing access to health care across the province.

Kind regards,

Barb Borland, RM
President - CMO

cc: Robin Kilpatrick, Registrar, CMO



March 7, 2013

Rob Theriault BHSc., EMCA, RCT(Adv.), CCP(f), President
Ontario Paramedic Association
Mapleridge RPO
1875 Lansdowne Street West
PO Box 21016
Peterborough ON K9J 8M7
rob.theriault@ontarioparamedic.ca

Via e-mail

Dear Rob:

Re: Paramedic Self-regulation

The College's Executive Committee has now had the opportunity to discuss your letter dated February 20, 2013 regarding self-regulation of paramedics in Ontario, under the provisions of the *Regulated Health Professions Act, 1991 (RHPA)*.

The College of Massage Therapists of Ontario (the "College") is in support of the Ontario Paramedic Association and its application for self-regulation under the RHPA. The College is of the opinion that self-regulation of the paramedic profession is appropriate to ensuring that paramedic care is provided in accordance with standards and in a safe and ethical manner for all Ontarians and that the public retains access to the governance processes of paramedics.

Regards,

Corinne Flitton
Registrar and CEO
College of Massage Therapists of Ontario



ONTARIO ASSOCIATION OF PARAMEDIC CHIEFS

1 Yonge Street, Suite 1801, Toronto, ON M5E 1W7

www.emsontario.ca

March 9, 2013

Robert Theriault
President
Ontario Paramedic Association

Dear Mr Theriault:

Re: OAPC Position on Paramedics Self-Regulation

The Ontario Association of Paramedic Chiefs (OAPC) endorses self-regulation for paramedics.

This has been an important issue since the Land Ambulance Transition Taskforce recommended self-regulation for paramedics in its 1998 Review of the Ambulance Act and Regulations.

The OAPC asserts that paramedic self-regulation is a necessary and appropriate direction for Ontario's paramedics. The profession is ready for self-regulation, and it is in the best interests of our patients.

Sincerely,

Norm Gale
President

c: Dr Jason Prpic, Chair, MAC
Mr Robert Burgess, Chair, OBHG

President Norm Gale
Email: ngale@thunderbay.ca
Telephone: 807 625-3259

Executive Director Jim Price
Email: x.d@emsontario.ca
Telephone: 519 878-7367



ONTARIO BASE HOSPITAL GROUP EXECUTIVE

January 28, 2013

Attention: Rob Theriault, President

Via Email/Regular Mail

rob.theriault@ontarioparamedic.ca

Ontario Paramedic Association
Mapleridge R. P. O.
P. O. Box #21016
Peterborough, ON K9J 8M7

Dear Mr. Theriault:

Rob

Subject: Request for Information

Thank you for your letter dated January 17, 2013 wherein you requested information related to quality assurance activities and medical directives from the base hospital programs.

Following our recent discussions with you, representatives from the eight provincial base hospital programs held a teleconference to review your request. Unfortunately, we will not be able to provide you with the desired information in the time frame indicated in your letter.

The provincial base hospital programs support the concept of a professional body for paramedics and would like to meet with you to discuss the application and review process in greater detail.

We would be pleased to arrange this meeting at the earliest opportunity.

Sincerely,

Robert Burgess, BHSc, AEMCA, ACP, CQIA
Interim Chair, Ontario Base Hospital Group

CC: Dr. Jason Prpic, Chair, Provincial Medical Advisory Committee
OBHG Executive Members
Provincial MAC Members

GEORGIAN
COLLEGE

One Georgian Drive
Barrie, ON L4M 3K9
(T) 705 728 1968
(F) 705 722 5123
www.georgiancollege.ca

Monday, March 11 2013

Attention: Rob Theriault
President, Ontario Paramedic Association

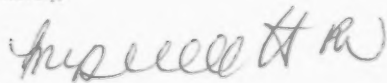
Dear Mr. Theriault,

I am writing to express my support for the Ontario Paramedic Association's (OPA) application to the Health Professions Regulatory Advisory Council (HPRAC) for self-regulation under the Regulated Health Professions Act (1991).

As a paramedic educator, I have a deep understanding of the challenges and complexities of a paramedic practice. Currently, paramedics are not regulated and although they have functioned well in providing safe client care, the opportunity exists to engage paramedics in new roles within the community and primary care. These new specialty roles will likely evolve in expanding paramedic practice within the community and in non-traditional settings. To have self-regulation would allow paramedics to participate more efficiently and effectively in health care delivery. A college of paramedics will also ensure competent, ethical, professional and compassionate care and be accountable to the public with the care they provide.

For these reasons, I believe that self-regulation for Ontario's paramedics is appropriate and wholeheartedly support the OPA's application.

Sincerely,



Randi McDermott, RN
Coordinator, Paramedic Programs
Georgian College





January 31, 2013

Attention: Rob Theriault
President, Ontario Paramedic Association

Dear Mr. Theriault

I am writing to express my support for the Ontario Paramedic Association's (OPA) application to the Health Professions Regulatory Advisory Council (HPRAC) for self-regulation under the *Regulated Health Professions Act (1991)*.

As a paramedic educator, I have a deep understanding of the challenges and complexities of paramedic practice. Although the current regulatory system has functioned well in ensuring patient safety in out-of-hospital emergency situations, as paramedic practice becomes increasingly aligned with primary health care delivery, new specialties evolve such as community paramedicine and more and more paramedic graduates work in non-traditional roles, self-regulation would allow paramedics to participate more efficiently and effectively in health care delivery. A college of paramedics will also ensure competent, ethical and compassionate care and give the public a greater say in the care they receive.

For these reasons, I believe that self-regulation for Ontario's paramedics' is essential and wholeheartedly support the OPA's application.

Sincerely,

Jim Whittle

Jim Whittle
Coordinator
Paramedic program
Algonquin College
1385 Woodroffe Ave.
Ottawa, ON, K2G 1V8
613-727-4723 ext.6047
whittlj@algonquincollege.com

CENTENNIAL
COLLEGE

January 30, 2012

Attention: Rob Theriault
President, Ontario Paramedic Association

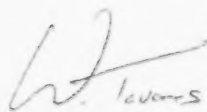
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I am writing to express my support for the Ontario Paramedic Association's (OPA) application to the Health Professions Regulatory Advisory Council (HPRAC) for self-regulation under the *Regulated Health Professions Act (1991)*.

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For these reasons, I believe that self-regulation for Ontario's paramedics is appropriate, and wholeheartedly support the OPA's application.

Sincerely,



Walter Tavares, ACP, PhD(c)
Coordinator of Paramedic Programs and Research
Centennial College
416-289-5000 ext 8018
wtavares@centennialcollege.ca

February 04, 2013

Attention: Rob Theriault
President, Ontario Paramedic Association

Dear Mr. Theriault

I am writing to express my support for the Ontario Paramedic Association's (OPA) application to the Health Professions Regulatory Advisory Council (HPRAC) for self-regulation under the *Regulated Health Professions Act (1991)*.

As a paramedic educator, I have a deep understanding of the challenges and complexities of paramedic practice. Although the current regulatory system has functioned well in ensuring patient safety in out-of-hospital emergency situations, as paramedic practice becomes increasingly aligned with primary health care delivery, new specialties evolve such as community paramedicine and more and more paramedic graduates work in non-traditional roles, self-regulation would allow paramedics to participate more efficiently and effectively in health care delivery. A college of paramedics will also ensure competent, ethical and compassionate care and give the public a greater say in the care they receive.

For these reasons, I believe that self-regulation for Ontario's paramedics is appropriate, and wholeheartedly support the OPA's application.

Sincerely,



Jessica Dykes, ACP-F

Professor/Coordinator, Confederation College



February 25, 2013

Attention: Rob Theriault
President, Ontario Paramedic Association

Dear Mr. Theriault

I am writing to express my support for the Ontario Paramedic Association's (OPA) application to the Health Professions Regulatory Advisory Council (HPRAC) for self-regulation under the *Regulated Health Professions Act (1991)*.

As a paramedic educator, I have a deep understanding of the challenges and complexities of paramedic practice. Although the current regulatory system has functioned well in ensuring patient safety in out-of-hospital emergency situations, as paramedic practice becomes increasingly aligned with primary health care delivery, new specialties evolve such as community paramedicine and more and more paramedic graduates work in non-traditional roles, self-regulation would allow paramedics to participate more efficiently and effectively in health care delivery. A college of paramedics will also ensure competent, ethical and compassionate care and give the public a greater say in the care they receive.

For these reasons, I believe that self-regulation for Ontario's paramedics is appropriate, and wholeheartedly support the OPA's application.

Sincerely,

Ralph Hofmann MA, BSc, ACP
Paramedic Program Coordinator
Durham College of Applied Arts and Technology
2000 Simcoe Street North, Oshawa, L1H7K4

Oshawa Campus
2000 Simcoe Street North
Oshawa, Ontario, Canada L1H 7K4
T: 905.721.2000
www.durhamcollege.ca

February 1, 2013

Attention: Rob Theriault
President, Ontario Paramedic Association

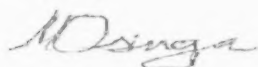
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For these reasons, I believe that self-regulation for Ontario's paramedics is appropriate, and wholeheartedly support the OPA's application.

Sincerely,



Mary Osinga, BSc, CCP(F)

Critical Care Paramedic (f) for Ornge
Coordinator, Paramedic Program
Sir Sandford Fleming College
599 Brealey Drive, Rm 436C
Peterborough, Ontario
K9J 7B1
mosinga@flemingc.on.ca
705 749 5520 (ext1733)
(866) 353-6464
fax: (705) 749-5540
www.flemingc.on.ca

February 05, 2013

Attention: Rob Theriault
President, Ontario Paramedic Association

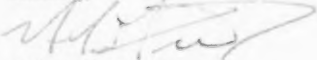
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For these reasons, I believe that self-regulation for Ontario's paramedics is appropriate, and wholeheartedly support the OPA's application.

Sincerely,



Neil Freckleton, ACP



February 5, 2013

Attention: Rob Theriault
President, Ontario Paramedic Association

Dear Mr. Theriault

I am writing to express my support for the Ontario Paramedic Association's (OPA) application to the Health Professions Regulatory Advisory Council (HPRAC) for self-regulation under the *Regulated Health Professions Act (1991)*.

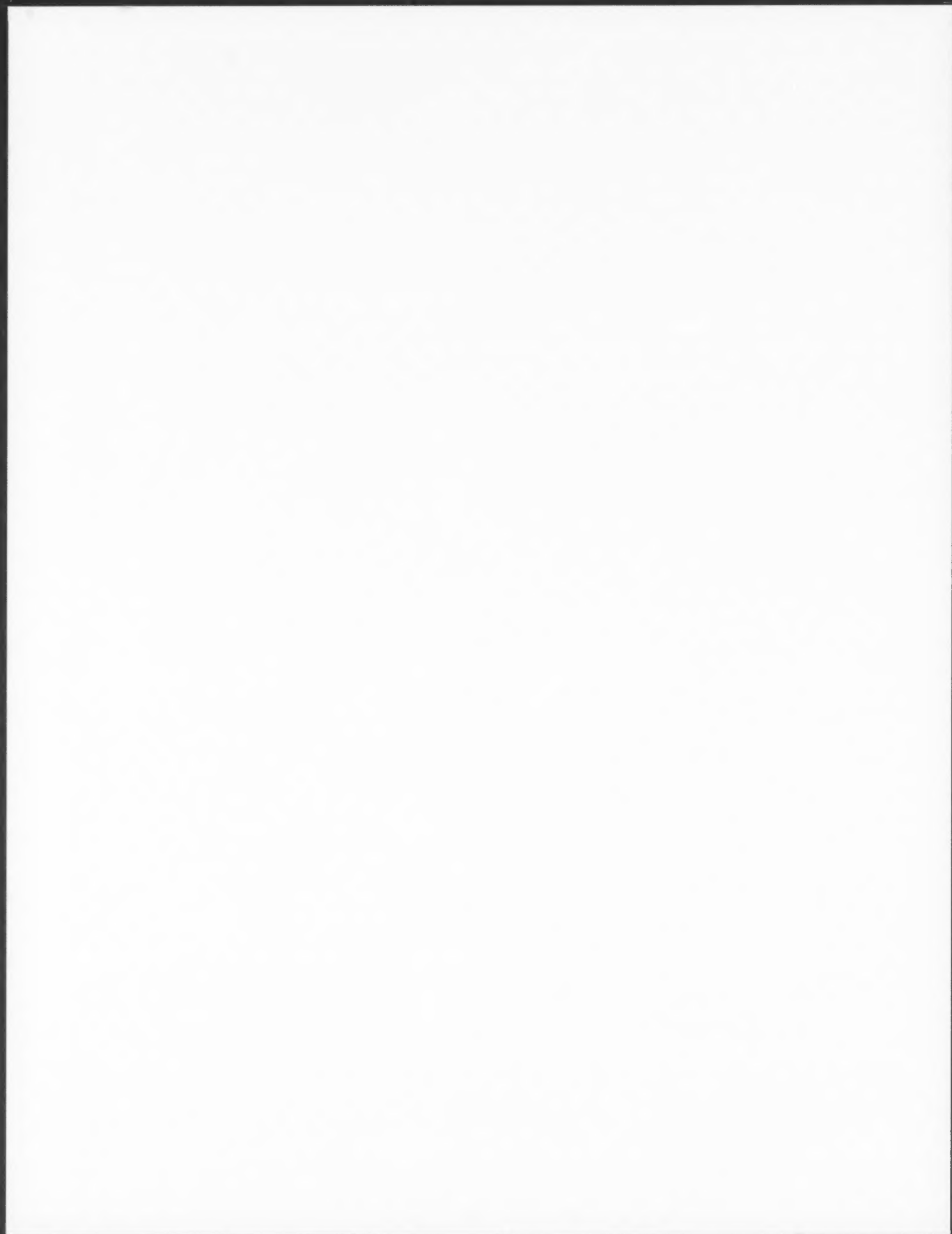
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For these reasons, I believe that self-regulation for Ontario's paramedics is appropriate and wholeheartedly support the OPA's application.

Sincerely,

Mr. F.W.J. (Kelly) Sheppard, D.H.Sc(c), M.Ed, BhlthSc, CCP, ACP, AEMCA.
Coordinator Pre Hospital Care & Paramedic Programs
Loyalist College Bancroft Campus
Ksheppard@loyalist.on.ca
Phone (613) 332-1743, Ext245
Fax (613) 332-4773

Loyalist College, Bancroft Campus
195 Hastings St. N.O. Box 10 Bancroft, On. K0L 1C0
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Appendix D: Glossary

Advanced Care Paramedics (ACPs): One of three levels of paramedic in Ontario. ACPs have more advanced knowledge and skills than PCPs.

Advanced Emergency Medical Care Assistant (A-EMCA): A comprehensive provincial exam set by MOHLTC. Successfully completing the exam is required for employment as a paramedic in Ontario.

Advanced Life Support (ALS) Standards: Describes the standards of practice and care by paramedics in Ontario, consistent with the scope of practice of the three levels of paramedics (includes controlled acts).

Base hospital program: Eight regional base hospitals (seven land, one air), designated by MOHLTC, which provide leadership and direction on aspects of ambulance-based pre-hospital emergency health care. Each base hospital's regional medical director provides guidance and medical advice, quality assurance and related advice, and advanced care skills training and certification. Policies and protocols specifically enable delegation to paramedics.

Basic Life Support (BLS) Standards: Sets out MOHLTC's expectations around paramedic-patient interactions for the period of time in which the patient is being cared for within the pre-hospital care system.

Canadian Patient Safety Institute (CPSI): A not-for-profit organization that develops evidence-based tools and resources to advocate for improvements in patient's quality of care.

Canadian Triage and Acuity Scale (CTAS): A tool that enables emergency departments (EDs) to prioritize patient care requirements and manage care delivery. The triage level assigned to patients is used in all EDs in Canada and is reported to CIHI.

Community paramedicine: A new field in which paramedics deliver care to people who require assessment, treatment and management for low-acuity medical problems, chronic health issues and health maintenance.

Continuing medical education (CME): Post-graduate education that helps those in the medical field maintain competence and learn about new and developing areas of their field.

Critical Care Paramedics (CCPs): One of three levels of paramedic in Ontario. In relation to PCPs and ACPs, CCPs have more advanced knowledge and skills.

Emergency Health Services Branch (EHSB): Administers and enforces the *Ambulance Act*; sets standards for education, evaluation and CME; conducts aspects of the complaints process; and engages in oversight of all aspects of the system, including those delivered by the municipal EMS providers and the base hospitals.

Emergency Medical Attendants (EMAs): OPA has clarified that the term "EMA" is "a legacy definition used in the *Ambulance Act* for grandfathering purposes that no longer has any corresponding entry-to-practice mechanism" (see page 3 of the application). MOHLTC has also stated that "all paramedics, regardless of classification, can be broadly referred to as EMAs."

Emergency Medical Services (EMS): EMS, or ambulance services, deliver health care to individuals suffering from sudden and serious illness. The public can access EMS (and police and fire services, EMS's public safety partners) by calling 911.

Emergency Medical Services Chiefs of Canada (EMSCC): A national organization led by chiefs and directors of Canada's EMS services with a mandate to advance and align emergency medical leadership across Canada.

Interprofessional collaboration (IPC): There are varying definitions of the terms "interprofessional care" and "interprofessional collaboration." HPRAC concurs with HealthForceOntario's definition for interprofessional care: "the provision of comprehensive health services to patients by multiple health caregivers who work collaboratively to deliver quality care within and across settings."

Local health integration networks (LHINS): LHINS are responsible for planning, integrating and funding local health services in Ontario. They manage the health services that are delivered in hospitals, long-term care facilities, community health centres, community support services and mental health agencies. There are 14 LHINS in Ontario.

Municipal EMS providers: Lead the actual delivery of ambulance services in their local area. Their duties include developing a governance and organizational structure to enable the delivery of services, managing vehicles and paramedics and funding ambulance operations. There are 53 certified municipal EMS providers in Ontario (municipal, private, hospital, First Nations and volunteer).

National Occupational Competency Profile (NOCP): Competency profiles have been developed that define the competencies of paramedic and emergency medical responders within Canada.

Non-emergency transportation (NET): NET vehicles fill a need within the health care system by transporting medically stable patients who do not require the care of a physician, nurse, other health care provider or paramedic during transport.

Ontario Association of Paramedic Chiefs (OAPC): An association that represents the paramedic leadership of Ontario's municipalities as well as its air ambulance service and some First Nations communities.

Ontario Municipal Benchmarking Initiative (OMBI): OMBI has developed a framework for assessing municipal performance on a total of 850 measures by standardizing metrics and data collecting/reporting protocols.

Ontario Paramedic Association (OPA): The professional association for paramedics in Ontario. It also submitted the application for self-regulation of the profession.

Paramedic Association of Canada (PAC): The national professional association for paramedics.

Primary Care Paramedics (PCPs): One of three levels of paramedic in Ontario.

Scene management: A theory on the coordination of specific social and other processes, by a paramedic, to control the space immediately around the patient in order to provide care.

Health Professions Regulatory Advisory Council

56 Wellesley Street West
12th Floor
Toronto, Ontario, Canada M5S 2S3

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Toll-Free: 1-888-377-7746
Fax: 416-326-1549

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Twitter: <http://twitter.com/HPRACOntario>
Email: hpracwebmaster@ontario.ca



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Ontario

Health Professions Regulatory
Advisory Council